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NATIONAL INSTITUTION BUILDING TO FACILITATE ACCESS
TO RISK MANAGEMENT MARKETS FOR SMALL PRODUCERS AND TRADERS
PARTICULARLY FROM DEVELOPING COUNTRIES AND
COUNTRIES IN TRANSITION: ISSUES INVOLVED
AND POSSIBLE WAYS TO OVERCOME THEM

Risk distribution after liberalization of
commodity marketing and problems of access to
risk management markets for developing country entities
- illustrated by the example of coffee in Africa

Report by the UNCTAD secretariat

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INTRODUCTION

1. In the proposals of the Group of Experts on Commodity Exchanges, as endorsed by the Standing Committee on Commodities in its second session (February 1994), the UNCTAD secretariat was urged to undertake in-depth research on the problems of access, of developing country entities in particular, to commodity price risk management markets.¹ The two studies that are before the Ad Hoc Group of Experts on Risk Management in Commodity Trade treat different aspects of these access problems. In this document, the issues discussed are linked to national market structures and the institution building needed to facilitate access to international risk management markets to those exposed to commodity price risks². In particular it examines how access to risk management instruments can be enhanced for farmers and smaller traders in countries highly dependent on export earnings from agricultural commodities and which have a relatively underdeveloped private sector infrastructure, and the appropriate role of the government in this regard.

2. The problems and possibilities in commodity export marketing and risk management in higher-income developing countries such as Brazil, Mexico or Indonesia are different, and will not be addressed in this paper. These countries are potentially able to "bundle" the needs for risk management among smaller players in their domestic economies through the creation of national forward or futures exchanges. These would allow larger players to lay off the risks that they take in such exchanges on the international market.³ There are some African countries where this option is also a real one. For example, the Zimbabwe Commercial Farmers' Union and the Zimbabwean Agricultural Commodities Exchange have established a cash market for wheat, which would allow for easier transmission of risks to the world's futures exchanges⁴. Also the problems faced by mineral and petroleum exporting countries when these exports are handled by one or more large firms are not covered. Again the problems are usually not ones of access but of creditworthiness ratings of these firms with market intermediaries and of suitable internal company control mechanisms for avoiding abuse of trading privileges. The former is covered in the other report; the latter - a fundamental issue in practice - is treated in some detail in annex I.

3. In order to present clearly the problems faced and the possible solutions, this report uses the example of coffee in Africa⁵. Coffee was chosen as it

¹ "Analysis of ways of improving the efficiency and use of existing mechanisms for the management of risks arising from commodity price fluctuations - Proposals of the Group of Experts on Commodity Exchanges", TD/B/CN.1/10/Add.1, 27 September 1993, paragraphs 13 and 14; Report of the Standing Committee on Commodities on its second session, TB/B/40(2)/13, TB/B/CN.1/19, 1994, Agreed Conclusions adopted by the Standing Committee on agenda items 3,4,5,6,7 and 8, paragraph 13.

² The other report (TD/B/CN.1/GE.1/3) concentrates on the issue of acceptability of developing country entities to the intermediaries providing access to international risk management markets, and, in particular, the access problems related to counterparty and sovereign risk.

³ The creation of domestic or regional exchanges and contracts is one of the issues discussed in the "Joint UNCTAD/World Bank study on risk management in Southeast Asia", prepared for a high-level regional workshop on commodity exchanges organized at Jakarta, Indonesia, 17-19 May 1993.

⁴ See K. Hunter, "Raw recruits", *Futures and Options World*, July 1993.

⁵ The information on the developments in the coffee sectors of African producers is largely based on the papers prepared for and presentations given during the workshop on "Government policies affecting coffee export marketing", Nairobi, Kenya, 29 November to 3 December 1993.

represents an obvious example of a shift in distribution of exposure to price risks owing to changes in government policies. In many developing countries including most African countries, internal marketing, prices and export marketing of the main agricultural export commodities were traditionally controlled by the government. Prices were either directly regulated, or stabilized through special funds. The government thus took on most of the price risks. Now, producer price regulation has weakened and many stabilization funds have disappeared. While farmers appear to be receiving a larger share of the final price of their product, they are no longer cushioned against the often large fluctuations of world market prices. Exporters, in particular those not working as agents for foreign buyers, are also exposed to large price risks. This shift of price risks from government to farmers and exporters raises a number of questions linked to these entities' ability to cope with their exposure to price risks, to the social acceptability of this distribution of risks, and to their perceived trustworthiness as trading partners in today's trading world. In particular, this paper will discuss the following issues:

- (a) Is it economically and socially advisable to let farmers bear the full brunt of world market price volatility? If not, is there a viable way to operate a minimum price scheme within the framework of a liberalized agricultural sector? What would be the components of an agricultural policy which empowers farmers (and exporters) to manage themselves the price risks which, in the past, were largely borne by the State?
- (b) Under what conditions will private exporters be considered as good, reliable counterparts by foreign importers, and when they are not, how can this be remedied?
- (c) Can private exporters make full use of the range of marketing and risk management instruments that are, in principle, available to them?
- (d) Are there residual price risks which still fall on the government, and if so, should these and can these be managed?

Chapter I

COMMODITY PRICE RISK DISTRIBUTION AT THE PRODUCING COUNTRY LEVEL

4. In the last few years, export marketing systems throughout the world have changed dramatically for many commodities, including coffee. African as well as Latin American and Asian governments took at times drastic measures to give a larger role to their private sectors. In the 51 producing members of the International Coffee Organization responsible for 99.5 per cent of the world's exports, the situation in 1985 was the following:⁶ 25 countries sold their coffee through boards, caisses, or other state monopolies or near-monopolies;⁷ 11 countries had a mixed situation in which state selling cohabited with a private sector; and 15 countries had an entirely private sector.⁸ Only eight years later, in 1993, the situation was completely different: three countries still had monopolies or near-monopolies; 10 countries had a mixed system; 38 countries had an entirely private sector.

⁶ Pierre Leblache, "Modern coffee marketing techniques and risk management", paper prepared for the workshop on "Government policies affecting coffee export marketing", Nairobi, Kenya, 29 November to 3 December 1993.

⁷ The monopolies and mixed structures include those in countries with a nominally private sector but where government bureaucracy implied that the state had in practice a right of veto on sales.

⁸ This includes countries where any public sector body had to compete against the private sector without any privilege or exemption.

5. Until a few years ago, and with only very few exceptions, African governments took the view that their activities in coffee marketing should include taking on the price risks linked to exporting to a world market characterized by highly volatile prices. These governments, through marketing boards and other regulatory agencies, took large price risks, in general managed through the operation of stabilization funds, not through fixed-price forward sales, which usually accounted for only a small part of annual production. Producer prices were usually announced before the start of the season. Private traders were often important within the marketing system, but basically as agents for the government: not only were their margins fixed, they were at times also allotted exclusive purchasing zones. Government intervention meant that there were few price risks for farmers, at least not within any one season, and virtually no price risks for traders: all price risks were borne by the state. Farmers did run some interseasonal price risks, although governments made an effort to keep prices from declining, at least in nominal terms. When farmers were exposed to price risks, it was because government control over the prices that traders actually paid was less than perfect. In effect, the major risk that traders and farmers ran was that of non-payment by the State; a risk that in several countries became very real indeed in the early 1990s, when the funds to subsidize prices at levels above world market levels were no longer available.

6. One important reason for this financial crisis was that, even when producer prices were realistic in relation to world market prices, governments very rarely made any effort to protect themselves against the risks of a consequent world market price decline. Stabilization funds were designed to allow for the subsidizing of the losses made in the marketing chain when producer prices plus marketing costs exceeded prices received for exports. In practice, however, such funds were often exhausted before they could be used for their original purposes. This put the cost of price stabilization directly on government budgets. In 1989-1991, when most governments failed to adapt producer prices to the low world market prices which followed the collapse of the International Coffee Agreement, the stress on government budgets proved too much. Governments solved their liquidity problems by delaying even further their payments to farmers and private sector intermediaries and pressures for a reform of the marketing and pricing systems increased. Within a very short period, most government coffee marketing boards ceased to exist.

7. Other factors also argued in favour of a greater role for free market forces. Firstly, as the world coffee market became increasingly competitive, a liberalized system was seen as less rigorous than a closed one: it encouraged a wider diversity of agents, a wider assortment of marketing methods and a higher flexibility and dynamism, as well as a better adaptability to world market changes. With a monopoly system, lack of pressure to improve efficiency and bureaucratic passivity were sometimes impediments to enhanced marketing and export efficiency. Secondly, some countries had problems of illegal coffee exports. As coffee producer prices were set by the government, and prices were different from country to country, a large quantity of coffee could be smuggled to the country with the higher price, particularly when prices differed widely. Liberalization of trade could fight illegal coffee traffic by keeping prices more representative and transparent and by reducing country-to-country price differentials.

8. The new roles of the state in agricultural marketing and pricing seem not to be well defined in many countries. In general, there is a need for activities such as maintaining and developing the quality standards of exports, maintaining and enhancing the image and reliability of export structure (for instance by providing an arbitration procedure in case of dispute or a record of clients' claims against specific exporters), and guaranteeing the fairest possible prices to growers through appropriate but realistic legislation and regulations. Most of these functions are not provided spontaneously by the private sector; however, it is not clear to what extent the new state entities responsible for their countries' coffee sectors have moved in this direction. Also, the links between

exposure to price risks and the capacity to manage such risks appear hardly to have been taken into account in policy formulation.

Chapter II

FINANCIAL PREREQUISITES FOR THE USE OF COMMODITY FUTURES AND OPTIONS BY DEVELOPING COUNTRY ENTITIES

9. Not all the markets in existence are necessarily useful from the point of view of developing country governments and entities (for more on this point, see annex II), and markets that meet all the risk management needs of these governments and entities do not necessarily exist. Therefore, analysis of whether there is a useful market should be the first action taken when considering the development of a price risk management strategy. When there is a useful market, one issue is of particular importance: does the user meet the financial prerequisites for futures and/or options.⁹ While certain developing country entities will have fewer problems than others in meeting these prerequisites, they are not necessarily the most exposed to price risks; conversely, those who are most exposed to such risks, such as farmers, do not automatically have the capacity to manage them.

10. This issue of financial strength is of particular importance. As is illustrated in the box below, the use of a futures or options market by an entity exporting coffee worth some US\$ 5 million may require, if this entity wishes to hedge all its risks in a straightforward way, an initial outlay of at least US\$ 700,000, to which payment for additional margin calls may need to be added. Few developing country entities are likely to be able to put up such an amount from their working capital, and sovereign risk issues will make it very difficult for most such entities to gain access to sufficient credit for undertaking large-scale risk management transactions. Ways to overcome this credit problem, which basically involve the creation of facilities to use commodities as collateral for loans, are discussed in the companion paper, "Counterpart and sovereign risk obstacles to improved access to risk management markets: issues involved, problems and possible solutions" (TB/B/CN.1/GE.1/3). As long as these credit problems are not resolved, developing country entities will have to rely mainly on their own working capital to cover loss-making futures positions, an effort which may be hard to sustain over a longer period. It should be noted that losses on futures should, normally, be equivalent to unrealized profits on physical commodities, but as long as there is no way to convert the value of these physical commodities into cash (e.g. using it as a collateral for a loan), this is a small consolation for those confronted with a call for immediate payment of a margin call.¹⁰ The price volatility of commodities such as coffee, sugar or aluminium is comparable to that of crude oil, so when hedging such commodities, the immediate need for convertible currencies may need to be of a commensurate magnitude. For many countries, it may be difficult to put up this kind of money.

⁹ For a description of the functioning of futures and options, and other market-based risk management instruments, see UNCTAD/COM/15, 13 March 1993, chapter III.

¹⁰ In a simulation for an average-sized oil company importing some 1.2 million barrels of oil a year (worth some US\$ 20 million), it was found that to cover a reasonable part of its price risks, this company should have immediate access, within 24 hours, to at least US\$ 100,000. The company should be able to draw down this amount day after day; cumulative cash-flow needs over a period of several weeks can then run into the millions of US dollars. See Stijn Claessens & Panos Varangis, *Hedging crude oil imports in developing countries*, World Bank, International Economics Department, WPS 755, August 1991.

A SIMPLIFIED EXAMPLE OF PRICE RISK MANAGEMENT FOR A FARMERS' COOPERATIVE

This example is for a cooperative X which sells to local exporters on behalf of its members, 2 million pounds of arabica coffee in each of the months of October, November and December, at fixed prices which reflect the New York Coffee, Sugar and Cocoa Exchange "C" contract prices minus 10 cts/lb in traders' margins. The cooperative wishes to protect its members against intra-seasonal price declines - that is, assure that the price at the beginning of the season is what farmers will receive as a minimum at the end of the season. For 1987, the cooperative's management proposed a fixed price of 112 cts/lb for the coffee to be delivered late 1987. This was accepted. The cooperative proceeded to sell 345 futures contracts, each for 17,500 lbs, on the exchange. As a security margin, it was requested to deposit US\$ 862,500 (US\$ 2,500 a contract), in a US bank account. In the following months, prices indeed declined. No additional margin payments were required. In July, prices had gone down so much that the cooperative stood to make a profit of US\$ 1.5 million if it sold its contracts. But fearing a further price decline, it didn't do so. When it started selling its first physical coffee in October, futures market prices had risen again to 118 cts/lb. The cooperative received 108 cts/lb for 2 million lbs, and made a profit of 4 cts/lb on the 115 futures contracts it closed out (it was able to buy these contracts back at 118 cts/lb, while it had sold them at 122 cts/lb). In November and December, prices were again up, to 125 cts/lb, and the cooperative made a loss of 3 cts/lb on the futures contracts while it received 115 cts/lb for its physical coffee. In both cases, it had secured the 112 cts/lb fixed price it had guaranteed its members.

In 1988, the management undertook a similar transaction at 115 cts/lb. This time prices increased. The cooperative was called to deposit additional security margins of almost 1 million US\$. When the coffee was finally sold and the futures contracts closed out, the higher-than-expected physical market price, of 126 cts/lb, was mitigated by losses of 10 cts/lb on the futures market. But again, the price of 116 cts/lb was secured.

Thus, in 1988, the cooperative lost comparative to a situation in which it hadn't hedged, in the simplified assumptions used here, over the whole period the security that hedging gave, and decided to shift to options. Options require a one-off premium, estimated here to be around 6 cts/lb; the total financial layout was thus US\$ 360,000, much less than that required for futures. The table above gives the result: the New York prices declined radically during the year, to an average of 71 cts/lb. But on its options, the cooperative made a net profit of 73 cts/lb, and farmers received a total price of 134 cts/lb for their coffee. For the following years, the table compares the prices that would have been received when not hedging, and when hedging with either futures or options, as well as the total financial outlay that would have been necessary when using futures.

Compared to a situation in which it hadn't hedged, in the simplified assumptions used here, over the whole period the cooperative would have made a profit on its option transactions of some US\$ 3.6 million, and a similar amount on futures (minus some 0.1 per cent of its sales volume in commission costs, US\$ 30,000). In reality, the cooperative would have made even larger profits because, using futures contracts, it could have locked in the contango which prevailed most of the past years. But these profits were largely coincidental: had the trend of prices been upward, hedging would probably have resulted in relatively lower prices. It should be stressed that hedging is primarily a management instrument, not a profit-making tool. It effectively provided the cooperative members with the comfort of price security, which, among other things, allowed them to make better investment decisions.

Year	Effective price received (cts/lb)			Maximum margins paid ('000 US\$)
	No hedging	Using futures	Using options	
1987	113	112	110	863
1988	126	116	121	1,823
1989	61	140	134	863
1990	79	66	74	2,003
1991	68	76	72	1,343
1992	58	63	59	863
1993	67	59	62	1,523

Initial premiums for at-the-money options are assumed to be US\$ 360,000 a year. No margins are paid on option purchases. The "futures" column represents the prices that can be locked in in the month of January of each year. The "options" column reflects the final outcome if in January, at the money put options had been bought.

11. The purchase of options is the principal way of using risk management markets without running into cash flow problems. For practical reasons, and in the absence of international action to alleviate cash-flow problems linked to the use of risk management instruments, options may therefore be easier to use than futures, in particular for countries with a poorly developed banking infrastructure.¹¹ Options, which effectively set a minimum price, also have managerial advantages: one cannot easily be blamed for missing out on a positive development of prices, which is inescapable when one has locked in prices through the use of futures. There is, however, a problem: choice of the right option strike price - in other words, buying the right insurance at a good price. But this problem can be overcome through appropriate, not too complicated, price analysis. The existence of expertise in some local banks in developing countries would also be most helpful (in African countries, the PTA Bank and the Nigerian Export-Import Bank are among those that have been investing in the understanding of options, and in acquiring useful trading and analysis software). Access to options trading is relatively easy to arrange. Even if a local banking intermediary is absent, one can set up, for instance, so-called "limited accounts" with brokers, earmarked for the purchase of options. The financial requirements are generally small: a few thousand dollars in an account in, for example, New York, London or Singapore would be sufficient for the purposes of most exporters.

12. Nevertheless, not all those exposed to price risks may be in a position to obtain access to the finance needed for risk management, in particular when use of foreign currencies is involved. The existence of a proper intermediary structure is thus essential for most developing country actors, in particular for farmers and small traders. The discussion in this chapter shows that the role of such an intermediary structure should not only be logistical (assembling the risk management needs of many small actors in order to lay them off on the international market), but also financial: the intermediaries need to play a credit-enhancing role. Ways of organizing such an intermediary structure, allowing farmers and traders who otherwise would not have the financial strength to access risk management markets to use these marketing tools, will be discussed in the next two chapters.

Chapter III

FARMERS' EXPOSURE TO PRICE RISKS AND POSSIBILITIES FOR RISK MANAGEMENT

A. Farmers' price risk exposure

13. Most agricultural export crops, including coffee, employ a large number of people. They are in general smallholder crops, and often the major source of employment in the countryside, in particular for women. For instance, coffee in Ethiopia provides employment for one quarter of the country's population, or more than 10 million people; in the United Republic of Tanzania, coffee is the main cash crop for about 1.78 million people; in Rwanda, around 510,000 smallholders depend on it, in Burundi, some 450,000. Fluctuations in coffee prices, when they are reflected at the producer income level, have an important effect on the welfare of a very large number of people. Even though farmers may have more possibilities for seasonal and interseasonal price stabilization than

¹¹ As noted before, margin calls on hedge positions should be reflected in increases in the value of the underlying physical positions; thus, well-functioning banks should be able to increase their lending to companies in order to allow them to pay margin calls. In practice, there are very few developing countries where banks have the required level of sophistication.

has been traditionally thought,¹² it is doubtful whether they are the best placed to bear the full brunt of the world market's instability.

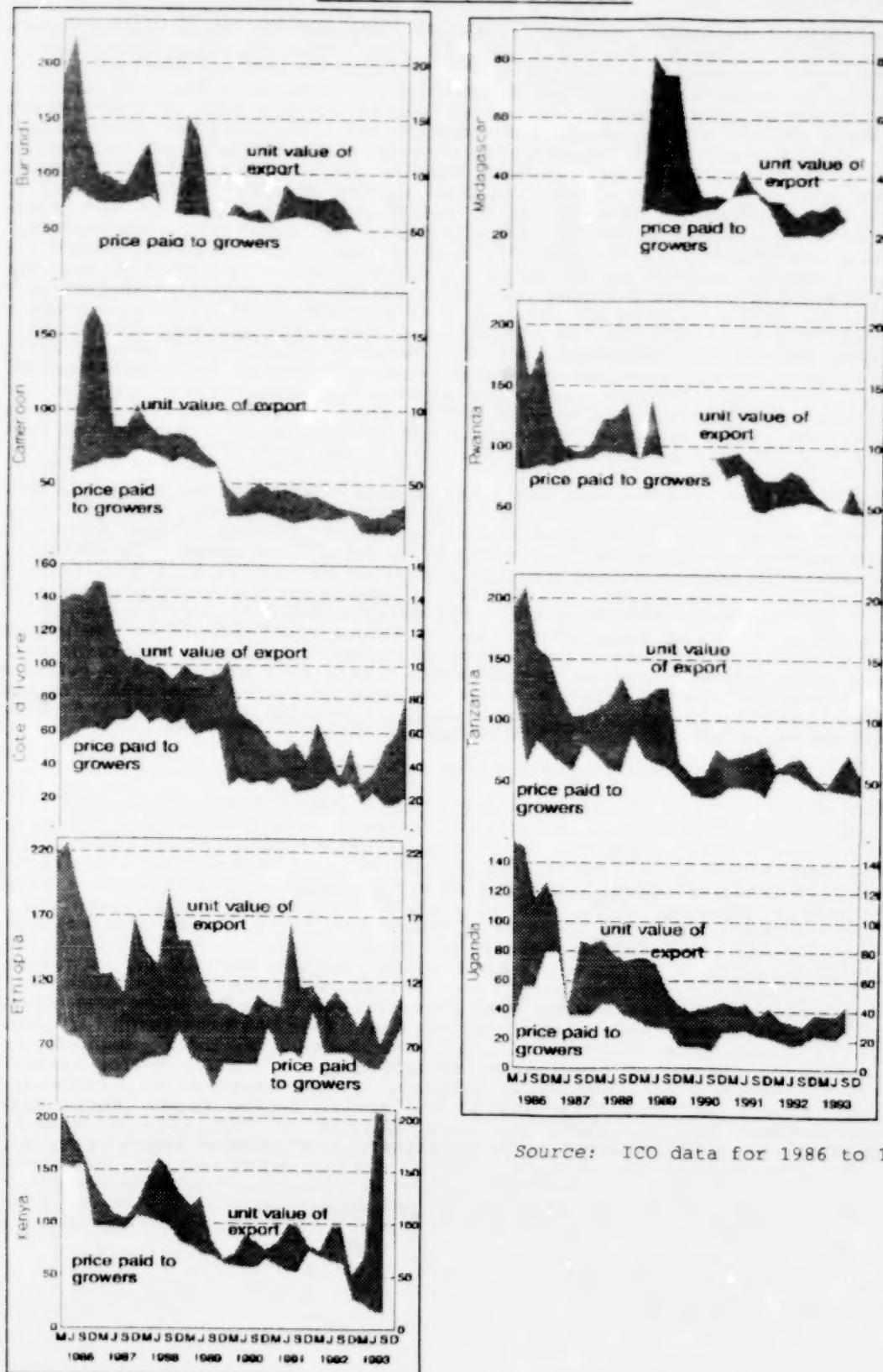
14. The extent to which farmers have been exposed to world market price volatility has differed from country to country. The following graph, which compares for nine African countries the unit value of exports and prices paid to farmers, gives an impression of the way that world market price declines have been absorbed in these countries, and of how risks have been shared between farmers and the various agents in the marketing chain (traders and government). Unit values of exports and prices paid to growers are compared for the months of March, June, September and December for the years 1986 to 1992,¹³ with the darkened area showing the amount absorbed by the domestic marketing chain, usually the government. In a number of countries, farmers used to be largely protected against world market price volatility - at least if one assumes that they were paid the official prices. In most of these countries, the government acted as a buffer, decreasing its marketing margin when world market prices were low. For example in Côte d'Ivoire the margin varied from 40 cts/lb in 1987 (and 80 cts/lb in 1986) to around 10 cts/lb in 1991 and 1992, before increasing again to 60 cts/lb in December 1993. Other countries where this happened are Burundi, Madagascar and Rwanda. In Cameroon, farmers received fairly stable prices, while marketing margins also remained remarkably stable, at least from 1988 onwards. In other countries, farmers were more exposed to price risks, both within marketing years and from year to year. This group includes Kenya, as well as Ethiopia, the United Republic of Tanzania and Uganda; this is despite the fact that the last three countries operated minimum price policies.

15. Minimum prices have now been abolished in most countries, and if they exist, they may only provide intraseasonal price stability, rather than stability from season to season. Burundi still maintains guaranteed minimum prices, announced at the beginning of the season, but plans exist to abolish these. In Ethiopia, the parastatal Ethiopian Coffee Purchase and Sales Enterprise buys from farmers at guaranteed minimum prices. In Cameroon, farmers in the robusta zones also profit from a minimum producer price. The disappearance of many minimum price schemes could have been expected to lead to larger fluctuations in the prices paid to growers, with these prices becoming linked to volatile export prices, but this is not clearly visible in the graphs. Only in Ethiopia and Uganda did farmers appear to benefit fully from the increase in prices late 1993. In the other countries for which these recent data are available, most of the price increase seems to have gone into the marketing chain.

¹² A number of studies suggest that farmers tend to save rather than spend most of unexpected extra earnings when prices boom: this has been found for cocoa farmers in Ghana (B.M. Ingham, "Ghana cocoa farmers - income expenditure relationships", *Journal of Development Studies*, Vol. 9, 1973), coffee farmers in Kenya (D. Bevan, P. Collier and J. Gunning, "Fiscal response to a temporary terms of trade shock: the aftermath of the Kenyan coffee boom", *World Bank Economic Review*, Vol. 3, 1989) and rice farmers in Thailand (C. Paxson, "Consumption and income seasonality in Thailand", *Journal of Political Economy*, 1992).

¹³ These data are not available for other months.

Unit value of exports and prices paid to growers, in US cts/lb., in different African countries in the months of March, June, September and December, 1986 to 1993



Source: ICO data for 1986 to 1993.

B. Providing access to price risk management markets for farmers

16. Farmers do have certain means to manage price risks.¹⁴ To manage interseasonal price risks, they can save in times of high prices and use their savings when prices are low. To manage seasonal price risks, they can store their crops, and sell them gradually over the year. When the prices for the products being grown appear low, they can cut down on their use of fertilizers, other inputs and manpower, and when prices are low during the harvest season they can decide to restrict the amount they harvest. When prices appear to remain low, they can plant a different crop or uproot their trees, or, if this is forbidden, simply neglect them. Nevertheless, these means for price risk management appear somewhat limited and inefficient in the face of the extent of world market price volatility. Moreover, while some of these may give short-term benefits, in the longer run they can be costly.¹⁵ It would thus not seem advisable to expose farmers fully to world market price volatility without giving them access to additional means of managing price risks.

17. With the size of commodity price risks prevalent in the international economy, it is unlikely that any individual producing entity can carry all these risks itself, without building up unrealistically high reserves. This has been recognized in many developed countries. For example, the Common Agricultural Policy of the European Union and the agricultural policies in Japan have essentially isolated their farmers from carrying any interseasonal price risks, and have also brought very limited intraseasonal price fluctuations for their major domestic crops.¹⁶ In Australia, Canada and New Zealand most major export crops have had centralized marketing boards, in particular for wheat and wool, which removed any incentive for individual farmers to use risk management instruments. This situation is likely to change with the agreement on agriculture in the Uruguay Round and discussions on how to introduce market-based risk management have started in Europe in particular.

18. Economic theory would suggest that one should be looking at ways to externalize risks: to lay off price risks to others who either have price exposure in the opposite direction (for example, while producers are hurt by price falls, consumers would be hurt by higher prices), or to speculators who are keen on taking on price risks. Commodity futures markets offer instruments such as futures and option contracts, which provide the means for such externalization of risks. In particular, options may be of interest for developing country producers, as they are relatively easy to use (see chapter III) and they provide insurance against price declines without impinging on the possibility to profit from price improvements.

19. In the United States, the only major developed country where farmers have been traditionally exposed to commodity price risks, some, usually large-scale, farmers do use futures and options markets directly. However, it is unlikely

¹⁴ Farmers are always exposed to quantity risks. The most common ways of dealing with these are agricultural insurance funds of various sorts. See, for example, UNCTAD, *Agricultural insurance in developing countries*, UNCTAD/SDD/INS/1, November 1992. Also compensatory financing schemes have helped to address this problem from an international perspective.

¹⁵ Without any form of price risk management, quantity reactions are the main way of coping with price changes. This can impose large adjustment costs: e.g., coffee production, once trees are uprooted or maintenance is ignored, cannot easily be brought back to a previous higher level; and if the level of production is volatile, the needed processing capacity will be relatively large while the efficiency of processing facilities will be low.

¹⁶ This is why there are no Europe-wide market-based risk management instruments available for agricultural crops such as grains or vegetable oils in Europe, except for those imported from developing countries such as coffee and cocoa.

that most farmers in the United States as well as other countries can do this, because they lack the necessary financial size, exposure and knowledge of the functioning of the markets or face problems of access to risk management markets.¹⁷ One way of addressing this problem is to stimulate the development of **intermediary entities** which would provide farmers with access to risk management markets. Indeed, in the case of the United States, cooperatives, processors and traders all act as funnels for coping with farmers' price risk management needs. Several types of intermediaries which are not necessarily mutually exclusive can be considered: **farmers' cooperatives, government entities, domestic banks, and private traders and processors.**

C. The role of cooperatives in price risk management

20. Farmers' **cooperatives** or similar farmers' **associations** can be a very viable type of intermediary. Even when government boards or domestic banks offer the possibility to use risk management instruments, these intermediaries are likely to abstain from doing business directly with small farmers and would prefer to operate with an association of a certain size.¹⁸ Farmers' associations could be interested in using risk management instruments for two main reasons. Firstly, such use could allow them to guarantee minimum prices for their members for the season to come, on the basis of prevailing market prices. The ensuing price risks can then be covered by buying put options either from domestic banks or from other intermediaries. Secondly, use of risk management instruments could make it easier to use a commodity as collateral for receiving loans or advance payments because the risks for the institutions providing these credits are lower.¹⁹

21. The major part of African coffee production is produced by smallholders who were traditionally organized in cooperatives or other associations. In many countries, a need has been felt in recent years to stimulate new farmers' associations to replace the older cooperative structures. It is not unlikely that a number of them will be able and willing to provide a full range of economic services to their members. This development is often promoted by governments, who see in a strong farming sector a necessary counterweight for the increased role of foreign private trade houses.

22. Providing price guarantees and better access to advance payments would appear to be useful services, falling within the realm of an efficient farmers' association's operations.²⁰ In some countries, it is considered a normal part of the duties of a cooperative's management. Indeed, a United States court found

¹⁷ For an overview of these access problems see UNCTAD secretariat, "Analysis of ways of improving the efficiency and use of existing mechanisms for the management of risks arising from commodity price fluctuations", TD/B/CN.1/10, 27 August 1993, chapter III.

¹⁸ The reasons for this preference include considerations such as credit exposure (the credit ratings of small companies are likely to be lower than those of larger ones); ease of identification of the counterpart's activities and financial status; the reduction of administrative and organizational costs through reducing the number of small transactions to be coped with; and the relative size of enforcement costs if the counterparty defaults.

¹⁹ This is the general situation in developed countries. In developing countries, few banks are sufficiently acquainted with this type of secured lending. See Nicholas Budd, "A guide to pre-export financing of physical commodities in origin countries", *International Financial Law Review*, January 1991.

²⁰ This issue was discussed during the World Farmers Congress, 2-6 May 1994, Istanbul, Turkey. The Congress' Standing Committee on Agriculture in Developing Countries found, among other things, that ways should be sought to allow greater use of risk management instruments by farmers' organizations (para. 14 of the report of the Committee).

in 1992 that the directors of a relatively small grain farmers' cooperative had a duty to understand hedging techniques and had, in the early 1980s, "breached their duties by retaining a manager inexperienced in hedging (...) and failing to attain knowledge of the basic fundamentals of hedging to be able to direct the hedging activities and supervise the manager properly..". The directors were held personally responsible for the losses made by the cooperative because the manager did not hedge its sales.²¹ In many African countries, farmers' associations already undertake some risk management or risk sharing activities, such as the operation of communal cereal stocks or communal saving activities. But they have not been managing export price risks, which, of course, for the farmers in most countries only became of significance a short time ago. Further institutional development and specific training activities, as well as a positive approach by governments, would appear to be the preconditions for bringing about a growth of the role of cooperatives in risk management.

D. The government as a risk management intermediary

23. A second option would be for the government stabilization funds or marketing boards, where they still exist, to be restructured to become service organizations for their country's farmers and traders. They could, for example, guarantee minimum price levels, and then, when market prices fall below this minimum, compensate farmers through complementary payments. This assumes that they had covered these price risks through the purchase of options on a foreign options market. For example, cooperatives could take out a "price insurance" with a stabilization fund, paying a certain premium for this, and the stabilization funds could use these premium payments to buy options.²²

24. Such government bodies have one important competitive advantage over most other possible intermediaries: being government-guaranteed entities, they are less of a risk to their Western counterparts, and thus are likely to obtain much better access to credit. This enhances their scope for undertaking risk management transactions. Also, they would benefit from some advantages of scale: the gathering of market information is one of their normal operations, and this would be of advantage for risk management transactions as well. It should also be noted that if the government considers the provision of minimum producer prices as a useful social goal (e.g. to keep farmers from migrating to towns), government intermediaries would provide an appropriate mechanism for financial transfers (e.g. direct subsidies for the purchase of options, as the United States Government is now granting on a test basis for a number of its grain farmers).²³

²¹ See *Brane v. Roth*, Court of Appeals of Indiana, First District, 20 April 1992, *North Eastern Reporter*, 2d Series.

²² When it started to liberalize its agricultural policy in 1992, the Mexican Government decided to set up an agency that would, among other things, fulfil the role of a risk management intermediary. This entity, called "Apoyos y Servicios a la Comercialización Agropecuaria" (ASERCA), provides intra-season price protection to cotton farmers on a voluntary basis. Farmers pay a fee to ASERCA for protecting the price of a certain expected production and ASERCA in turn protects itself by buying put options on the New York Cotton Exchange. Farmers sell their cotton themselves, but when world prices drop, ASERCA reimburses them the profit on the options. ASERCA also is active in wheat, maize and soybeans futures and options, to lock in the amount of subsidy it has to pay to the end users of these products (who are compensated for the difference between the Mexican guarantee price for these grains and the international price).

²³ See, for instance, George Gunset, "Futures may be cheaper option than farm subsidies", *Chicago Tribune*, 4 February 1993.

E. Developing country banks as risk management intermediaries

25. Local banks (whether nationally owned, subsidiaries of foreign banks, or regional banks) can also become active intermediaries. Commodity price risk management instruments are financial instruments, and banks would be logical intermediaries in providing access to risk management markets. In effect, when government regulations do not prevent this, well-functioning banks usually provide a gateway to currency and interest rate risk management instruments for their clients. The knowledge and contacts thus acquired should make it easier for them to enter into the commodity price risk area. Banks also serve their own interests in providing commodity price risk management instruments: they can help to make credit arrangements of various types (e.g. pre-harvest credits; pre-export credits) more secure, and thus increase a bank's potential for profitable business. Many local banks already have direct contracts (through electronic links such as the Swift system) with banks in Europe and the United States, so in terms of required infrastructure they are relatively well placed. One possibility for them is to limit their risk management activities to those of a pure intermediary type (that is, acting as a "broker" and credit line provider for their clients, but immediately placing all orders with Western banks or brokers). They could also choose to play a more active role, acquiring the necessary knowledge, software and hardware for managing their own portfolio of futures and options positions. Two African banks, the Nigerian Export Import (NEXIM) Bank and the PTA Bank (active in most southern and eastern African countries) have followed the latter route, and it is useful to discuss their actions in some detail.

26. Both the PTA Bank and the NEXIM Bank introduced what they called price guarantee contracts (PGCs) in late 1993.²⁴ A PGC is in effect a put option, protecting those who take out the contract against negative price changes on overseas futures markets. They are being sold by the banks in conjunction with their commodity trade financing activities. The banks think that this service will strengthen their trade finance activities. Both banks have chosen to be more than just an "introducing broker". Instead, they will trade an active option portfolio in the hope that this will help to reduce variable costs. To make this possible, they have invested in computer hardware and software, and have trained their personnel. These banks have found that the costs of introducing these systems amount to less than US\$ 0.5 million,²⁵ which is low compared to the volatility of commodity trade flows from the countries involved; for example, taking the average weekly coffee exports from the United Republic of Tanzania, coffee prices are so volatile that earnings can easily move by US\$ 100,000 from one week to another.

F. Domestic traders as vehicles for farmers' price risk management

27. In a situation where competition among the traders buying crops from farmers is strong, access of traders to risk management instruments would in all likelihood immediately be reflected in prices and marketing conditions for farmers.²⁶ Usually traders buy from farmers at spot prices. This can be a one-off price, or an advance, with a premium to be paid when world market prices at the time of exports are sufficiently high. In both cases, traders will tend to pay a relatively low price to farmers, especially when they have no means to manage the risks of a price decline between the time of purchase and the time

²⁴ Information provided by the PTA Bank at the workshop on "Government policies affecting coffee export marketing", Nairobi, Kenya, 29 November to 3 December 1993.

²⁵ Information provided by Commodity Risk Management S.A., Geneva.

²⁶ Such is the case in the United States of America, where traders and processors give farmers the choice of a whole range of marketing mechanisms, made possible because these intermediaries can lay off their price risks on risk management markets.

of exports. A trader who is able to eliminate this risk will have a competitive advantage: he will be able to pay a higher price or higher advance, and will thus increase his turnover. If other traders want to survive, they have to follow his example. This development has occurred in Costa Rica, for example, where a few trading companies, using options to cover their price risks, started to give much larger than usual advance payments to farmers. Traditionally, they advanced 40-50 per cent of the expected final export price to farmers. This may appear low, but in effect, coffee price volatility in recent years has been so high that during three of the last 15 years a number of Costa Rican exporters and millers went bankrupt when coffee prices unexpectedly and strongly declined. With the use of options, exporters/millers were able to advance up to 80 per cent of the expected final price, and this has now become a general practice.²⁷

28. To make traders transmit the benefits of risk management to farmers requires the fulfilment of three essential conditions. Firstly, a competitive environment. Many studies in Africa have found that competition between traders is rather weak. There are few local traders (a situation not unrelated to the long-time government monopoly), and a lack of financial means prevents these traders from fighting aggressively for market shares. The dominance of a limited number of subsidiaries of foreign trade houses also does not provide for much competition. The second condition is that several of the traders are large enough to be able to buy options on foreign exchanges²⁸; or, if the traders themselves are not large enough to carry the implicit and explicit fixed costs of direct use of risk management instruments, that there are other intermediating agencies, that is, banks or a government board, or even foreign businesses which would allow smaller traders to buy options locally from them. Interestingly enough, there are several African countries where some traders are sufficiently large to consider using options. For example, the United Republic of Tanzania has some fourteen traders who export over US\$ 1 million worth of coffee a year. Thirdly, conditions need to be such that traders can actually use foreign option markets; that is, they need the knowledge to do so, and government policies need to be sufficiently permissive. In both respects, there may still be problems to be overcome.²⁹

G. Promoting an appropriate framework for farmers' price risk management

29. The combination of these possible intermediaries which works best in a country depends on its economic and institutional conditions. Also intermediaries are in many cases complementary rather than mutually exclusive. In a number of countries, state entities may not be the ideal candidates in the long run, but may be the only ones able to fulfill this role in the short run (while stimulating the private sector). In general, it would appear advisable to make farmers co-responsible for minimum price guarantees: that is, farmers themselves should indicate their interest in receiving minimum prices, and should pay for this possibility. This can be achieved by domestic banks or government entities offering "price insurance" to cooperatives and large farmers, or by traders offering higher advance payments in exchange for, possibly, a lower additional final payment. In any case, either a well-developed and competitive private trader network, a modern banking system, or a good cooperative system would

²⁷ S. Claessens and R.C. Duncan (eds.) *Managing Commodity Price Risk in Developing Countries*, John Hopkins University Press/World Bank, 1993.

²⁸ Which would basically imply that they are able to initiate and maintain contacts with foreign brokers; and are able to immobilize a few thousand dollars in a foreign bank account.

²⁹ See TD/B/CN.1/10, 27 August 1993, chapter III for a discussion of the necessary local conditions.

appear necessary to make such a minimum price scheme feasible. In countries where any one of these conditions exists, it would seem feasible to overcome the various operational difficulties and implement a system of sound risk management practices, giving farmers the price protection that governments have long recognized as being essential to maintain a viable agricultural sector.

Chapter IV

THE ROLE OF LOCAL PRIVATE TRADERS IN A LIBERALIZED EXPORT TRADE SYSTEM

A. Recent changes in the roles of private traders and in the risks to which they are exposed

30. In the wake of the demise of many of the state entities controlling commodity exports, including coffee, the importance and autonomy of private traders has grown strongly, and the auction system has been revived in many countries. Private traders now account for the majority of coffee exports in all of Africa's major coffee-producing countries, with the exception of Ethiopia. There are basically two systems: exporters collect their own coffee inland, or eventually through other traders; or exporters acquire their coffee at an auction, with farmers' cooperatives and state entities responsible for most of the domestic collection and marketing. Cameroon, Côte d'Ivoire, Madagascar, Uganda and Zaire fall in the first group, Burundi, Ethiopia, Kenya and the United Republic of Tanzania in the second.

31. Auctions are becoming increasingly important in Africa: in the case of coffee, an auction has been newly introduced in Burundi, and existing auctions have increased in importance in Ethiopia and the United Republic of Tanzania. They are often used when domestic marketing is dominated by either government entities or cooperatives. This is because auctions allow the bringing together of the crop of a country, such as coffee, for sale to the private sector, which often comprises agents of foreign trade houses. Theoretically, and often in reality, auctions have increased revenues for the state and/or for the growers.³⁰ However, they also have an important drawback as their operations preclude any forecast of the coffee availability to a given exporter. Therefore, either an exporter is prevented from making long-term commitments such as regular sales over an extended period, or, and this is what happens in practice, exporters are left in total uncertainty as to the price they will have to pay for the commodity they have sold ahead. In this situation more than in any other, price protection for the exporter is indispensable if he is to have any surety about his future business.

32. Nowadays most traders are not fully protected against price risks by government stabilization activities. Only in Côte d'Ivoire and in the robusta sector in Cameroon is there still such protection. In both cases, a stabilization fund is used to subsidize exports when minimum producer prices plus agreed marketing costs exceed the world market price.³¹ Except in Kenya, local traders were not accustomed to having exposure to price risks, and many have found it difficult to adapt. According to the scarce information available, exporters are in effect now agents of foreign trade houses, and have thus replaced state guarantees on their marketing margin by foreign company guarantees. In the absence of other ways to manage price risks, purely nationally-based companies find it difficult to compete.

³⁰ Auctions provide a certain degree of price transparency and of market openness, which can help to bring in new traders when prices are too low. See Robert A. Feldman and Rajnish Mehra, "Auctions: theory and applications", *IMF Staff Papers*, September 1993.

³¹ The system in Côte d'Ivoire is currently under review with the assistance of the European Union and the World Bank.

33. Also the traders responsible for exporting the crops previously exported by state entities find themselves confronted with a world market which is no longer like it was ten or even five years ago.³² For example, on the side of coffee roasters and traders, there has been a growing concentration of purchases and sales, while on the exporters' side, the marketing system has become highly fragmented. Thanks to the multiplication of air links, the increased availability of telecommunication facilities, and the development of industry forums like the International Coffee Organization, trading links have become much more diversified, leading to a growing fungibility of coffees from different origins. Hence, the role of "coffee world market prices", that is, the prices formed on the Coffee, Sugar & Cocoa Exchange (New York) and the London Commodity Exchange, has grown. Trading practices have changed, with fixed price spot and forward contracts declining in importance compared to so-called differential pricing. These changes put a heavy burden on coffee exporters: to remain competitive, they have to adapt.

34. Faced with the current difficult circumstances in commodity markets, good marketing is now a real imperative for all exporters. Good marketing includes such behaviour as reliability, respect for contracts, quality consciousness, and flexibility. One important way to increase flexibility and reduce the temptation to default on contracts is to adapt to new pricing methods. For example, in world-wide coffee trade, the trend is one of reduced reliance on fixed prices in forward contracts, in favour of price-to-be-fixed pricing clauses (prices remain open as long as the exporter does not fix them). African exporters are to a large extent lagging behind in this evolution. As long as they are not operating on a fixed margin, or on an agent-basis for a foreign trader, traders in Africa, as elsewhere, run intertemporal price risks. Time elapses between the moment that they buy the commodity from farmers and the moment that they sell it to a foreign buyer. It is not infrequent that traders, confronted with world prices which have declined since they bought the commodity, postpone their sales in the hope of better prices. Also, they may be contacted for a sale while they do not have the required product in stock; they then run the risk that, if domestic prices increase, they will not be able to buy the necessary commodity from farmers in order for them to fulfill their contract. When they cannot lay off their price risks on the market or, for instance, with a government agency, traders tend to react to these risks in four ways. They build a risk premium into the price that they pay to farmers (that is, farmers get relatively low prices); they refrain from transactions that they deem too risky, such as selling a commodity that they do not yet own (that is, they forego commercial opportunities); they operate stocks that are larger than commercially and financially optimal (tying up their working capital, and incurring storage costs); and they tend to sell mainly on a "spot" basis, thus foregoing the often large premium on forward sales which prevails in the world market.

B. Private traders and counterparty risks

35. Forward contracts were the traditional way of price risk management for government marketing boards, which ensured in this way at least part of their earnings. With the privatization of export systems, the scope for this traditional means of price risk management has declined. As is remarked in a recent World Bank report, "this is because with market liberalization, forward sales are likely to diminish as counterparty risk may become larger when dealing with new private exporters."³³ It should be noted that even if private exporters are able to enter into fixed-price forward contracts, government regulations may

³² See Pierre Leblache, *op. cit.*.

³³ S. Satyanarayan, E. Thigpen, P. Varangis, *Hedging Cotton Price Risk in Francophone African Countries*, World Bank, International Economics Department, International Trade Division, Policy Research Working Paper 1233, December 1993.

prevent them from doing so. For example, in Ethiopia, contracts for several shipments over a longer period are rare because of National Bank restrictions on this type of sales. Foreign buyers, when confronted with a relatively large default risk, naturally react by building a risk premium into the price that they pay to the country's exporters, which in turn deprives the exporting country of valuable export earnings. It should be noted that in some countries which have retained minimum prices for farmers, governments are trying to promote forward sales. For example, in Cameroon and Côte d'Ivoire, efforts are currently being undertaken to promote such sales but these are likely to reduce export earnings as long as parallel measures to counteract counterparty risk problems are not taken. One way to make exporters more acceptable as counterparts is the creation of a guarantee system among exporters. In such a system, all exporters would have to be registered, and would have to deposit a certain part of their turnover into a special guarantee account. If one of them defaults, the money from this account will then be used to secure the fulfilment of his export contracts.

36. Exporters often rely heavily on their foreign counterparts for finance. Due to the fact that in general local interest rates are much higher than international interest rates, the majority of exporters work on a pre-financing basis. For example, in Burundi, the overseas buyer transfers the value of his imports within four days from the date the local exporter has purchased the coffee from the auction floor. The exporter only has to pay the coffee he bought at the auction within seven days, so in effect, he does not need any separate financing. This also helps the country to receive its foreign currency early (payment-on-delivery would mean a delay of three to four months, the time necessary to ship the coffee and undertake the necessary payment procedures). But on the other hand, it limits the local exporter's margin, and ultimately, the country earns less foreign currency.

37. Quality control problems, larger counterpart risk and a pressure to sell fast for cash flow reasons, as well as lack of experience in export marketing would all appear to indicate that new private exporters are likely to obtain a lower price and less beneficial marketing conditions than the former marketing boards. This is indeed reported by many international traders doing commodity business with Africa. However, a lack of adequate data, and the complication that a large part of export business from African countries is now effectively in the hands of foreign companies, make this impossible to verify.

C. Ways to enhance access of traders to risk management instruments

38. Enhancing access to risk management markets would stimulate the competitiveness of local exporters, ameliorate the flexibility of those traders who do not act on an agent-basis for a foreign buyer, reduce counterparty risks, and improve access to credit. There are several ways of helping traders become more acceptable counterparts and get access to risk management instruments. Firstly, in many countries domestic banks can play a major role in assisting local traders. However, this has not been a normal function for many of them and they lack experience in financing trade and risk management activities beyond being a conduit for government budget transfers to marketing boards, and are often reluctant to accept commodities as collateral for loans. There is therefore likely to be a lag in response from local banks until the trade sector is seen as a good risk for loans. Secondly, a government body or an exporters' association can take the responsibility for helping individual exporters to overcome the barriers they face. Activities of such a body can include the organization and coordination of training activities, the provision of information including real-time price information, and, where possible, a credit-enhancing role. This credit-enhancing role can be direct, such as by converting lines of credit of domestic banks into foreign credit lines which can then be used for risk management, by intermediating in the purchase of options, or by setting up a mutual guarantee scheme. This last option is being considered in Cameroon. Credit enhancement can also be indirect, for example through the provision of training on ways to improve access to credit, and the identification of legal barriers at the country level which hinder access to credit.

39. One potentially useful role for the government would be to keep its marketing board or stabilization agency as a "guarantor of last resort" for various forms of sales, a function it could fulfil for as long as it takes private exporters to build up good relations of trust with foreign buyers. This function could be linked without much problem to that of quality control, another export service that is also difficult to transfer to the private sector from one day to another. Such government guarantees for contract fulfilment would build confidence in the country, and would result directly in lower costs of trade for the international buyer.

Chapter V

THE EXPOSURE OF A GOVERNMENT TO PRICE RISKS IN A LIBERALIZED COMMODITY TRADING SYSTEM

40. Until recently, many governments of developing countries, particularly in Africa, were directly and strongly exposed to the fluctuations of the prices of their major export commodities. Not only did they make up the deficits in stabilization funds out of the general budget when commodity prices declined, but also a large part of their tax earnings came from export taxes on commodities. For example, in the mid-1980s, taxes on coffee accounted for 30-40 per cent of government tax earnings in countries such as Ethiopia and Uganda. Recently, with the fall in coffee prices and shifts in government taxation policy, taxes on coffee have become somewhat less important, although still accounting for about 10 per cent of government tax income in, for example, Cameroon or Ethiopia.

41. Many stabilization funds have disappeared in recent years. While the argument often used for abolishing stabilization funds is that they were economically unsustainable, there were also problems related to past experience with the raiding of the funds' resources for other purposes. Finance-related difficulties with stabilization funds have not been limited to those in Africa, but have occurred also in other countries and at an international level, for example with the European Union/ACP Stabex facility. Commodity price volatility is so high that any stabilization fund is likely to become exhausted at one time or another, unless it levies unrealistically high taxes on exports in normal years. But there is no reason for well-designed stabilization funds to use only accumulated savings as the way to manage price risks. The use of market-based price risk management instruments can help make the operations of a stabilization fund easier to manage.³⁴

³⁴ Commodity prices move in an asymmetrical way: long periods of relatively stable prices are interspersed with short periods of strong price movements. It is during the periods of strong price movements that stabilization funds tend to run into problems. This can be prevented by the purchase of out-of-the-money options which are rather cheap. See D.F. Larson and J. Coleman, "The effects of option-hedging on the costs of domestic price stabilization schemes", World Bank, International Economics Department, WPS 653, April 1991; and S. Claessens and P. Varangis, "Oil price instability, hedging, and an oil stabilization fund - the case of Venezuela", World Bank International Economics Department, Working Paper No. 1290, April 1994.

42. While exposure of governments to commodity price risks would appear to have diminished in recent years, even in a fully liberalized trading environment the government is still exposed to a number of risks,³⁵ in particular:

- The risks of macroeconomic price shocks: "Dutch disease" effects; misallocation of investments; reduction of overall investments;
- The risks of reduction of foreign exchange reserves through uncontrolled speculation on foreign risk management markets;
- The risks of social unrest due to price shocks;
- The direct and/or indirect risks of reduced taxation income.

43. The example of the United Republic of Tanzania shows that the risk exposure of governments can be rather direct. The Government has a pre-financing arrangement for its oil imports. This pre-financing arrangement is secured through coffee export proceeds: the country sells part of its coffee to a specific group of traders, who then reimburse the banks. If coffee prices decline, the Government has to procure and export a larger amount of coffee to reimburse its debt.³⁶ As securitization arrangements have already been built into the financing, it would be relatively easy to eliminate most price risks (that is to fix, through an over-the-counter commodity swap, the amount of coffee which has to be paid for each barrel of oil), but this is not done yet.

44. A government has a legitimate interest in managing the various price risks to which it is exposed. One important reason for doing so would be to facilitate its own budget planning.³⁷ Macroeconomic price shocks can be dealt with to a considerable extent through macroeconomic policies (a monetary absorption policy of the Central Bank; or other fiscal and monetary measures, currency and capital controls, and real exchange rate corrections). However, such macroeconomic policies can result in a serious disruption of the economy and significant resource misallocation, and they are therefore rarely the most appropriate type of measures for managing commodity price fluctuations. Market instruments can be used for the same purposes, but without these distortionary effects.³⁸

45. The risks of losing foreign exchange reserves through uncontrolled speculation on commodity markets can, in a liberalized economy, be addressed only by clear rules on what private traders can do and what is forbidden, and

³⁵ The discussion in this paper concentrates on export price risks. Import price risks are also large, and similar arguments for undertaking commodity-price stabilization activities can be made. Changes in prices of imported foodstuffs or imported fuels can have a large influence on consumer welfare and, indirectly, political stability. The most efficient way to manage these risks is in all likelihood through use of market-based instruments, rather than through variable taxation and/or direct State subsidies.

³⁶ See R. Khijjah and C. Sonyi, "Government policies affecting coffee marketing - the Tanzania experience", paper prepared for the workshop on Government policies affecting coffee export marketing", Nairobi, Kenya, 29 November to 3 December 1993.

³⁷ It should be noted that these risks need to be actively managed, rather than only forecast and taken into account in government planning. Experience shows that commodity price forecasts are notably unreliable. For example, the World Bank found that the coefficient of variation of the actual commodity prices from its forecast prices, for only a one-year horizon, was about 25 per cent. Also, resorting to international lending to balance out changes in commodity export earnings is difficult in practice: for most developing countries, access to credit is particularly difficult when commodity prices are low.

³⁸ See Stijn Claessens & Ron Duncan, "Case studies in commodity price risk management and finance: an overview", in S. Claessens and R. Duncan (eds.), *op. cit.*

consequently, monitoring of their operations. For example, the uncovered sale of options (which can give rise to large foreign exchange losses) should in many cases be restricted, and measures should be taken to reduce the chances for avoiding taxes. Some type of risk management unit within one of the central government agencies could fulfil this monitoring task.³⁹ Colombia has set up such a unit; in other countries, such as Chile, all futures market operations have to be reported to the Central Bank and be justified as legitimate, trade-related hedges. Failure to undertake some monitoring operations, especially when the use of market-based risk management instruments is relatively new and most users are inexperienced, can be very expensive.⁴⁰

46. If taxes on commodity exports are still of large importance for the government budget, the negative impact of price declines on government taxation income can, at least in the short term, be overcome by government operations in futures, options and swaps; similar practices have become current in a number of national and regional governments highly dependent on taxes on oil sales.⁴¹

47. In all cases, the starting point is a systematic analysis by governments of the price risks to which they are exposed, and then the development of measures which would allow them to manage these risks. A good vehicle for such actions may well be a special unit, bringing together the expertise of a number of ministries and the Central Bank, which identifies price risks and sets targets for the degree to which price risks should be managed. The actual management of risks could be centralized within one unit (e.g., a government marketing support agency, which anyway has to possess good knowledge on risk management, can act as an agent), but it may be more effective if the directly concerned government bodies are made responsible for managing their own risks. A good complement to this government action would be the stimulation of awareness in the private sector of the risks to which traders, processors and farmers are exposed, and the stimulation of intermediary institutions which would allow the management of price risks.

CONCLUSION

48. Many governments have abolished most of the structures and institutional arrangements that gave shape to their commodity marketing and pricing policies. While such changes are welcome in that they have reduced the burden of an inefficient marketing system on the farmers, they have run into problems in two main areas: they do not take into account the degree to which the private sector is ready and able to take over in an efficient manner export marketing activities from the State; and secondly, they have returned the burden of world market price

³⁹ This was one of the recommendations of a recent Economic Commission for Africa (UNECA) seminar. See UNECA, Report of the Seminar on the Review of Africa's Debt Situation and the Impact of Declining Commodity Prices on Africa's Capacity to Grow and Service its External Debt, E/ECA/TRADE/93/24, November 1993, recommendation to the Conference of African Ministers of Finance, no. 4: "that Governments of African countries should be encouraged to establish risk management units in the Ministry of Finance or the Central Bank to serve as a focal point for any activity in the risk management area." See also UNECA, Report of the Fifth Session of the Conference on African Ministers of Finance, Libreville, Gabon, 1-2 March 1994, E/ECA/TRADE/94/3.

⁴⁰ See annex I.

⁴¹ For example Mexico, and the US states of Texas and Wyoming. Other countries, US states and other government entities protect part of their fuel purchasing bills through hedging programmes, e.g. Brazil, Chile, Honduras, Delaware, Massachusetts, and several US municipal entities.

volatility to those who are least able to manage it, that is, farmers and small traders.

49. It is generally recognized that it is economically and socially not advisable to let farmers and small traders bear the full brunt of world market price volatility. Also, as these actors are not in a position by themselves to lay off their price risks to others, the economy as a whole would be exposed to large risks. Small traders are usually seen as risky counterparts, and those buying commodities from these traders tend to discount prices to reflect the risks that they take. This report has identified the possible components of an agricultural policy which empowers farmers, and exporters, to manage themselves the price risks which, in the past, were largely borne by the State, without building a new, top-heavy government infrastructure. It appears that where the private sector is relatively underdeveloped, stabilization funds or other government marketing support agencies can serve a useful purposes as a risk management intermediary without being actually active in exporting commodities. In many countries they would appear as the best candidates currently available for addressing the problems facing farmers and local traders: exposure to high price risks, lack of access to credit, and lack of access to modern marketing instruments. To play such a role, these funds or agencies would need to be market-based, providing services to the private sector and laying off most of their risks on the international market. This intermediary role by the public sector need not be seen as a substitute for more effort to build up the private financial intermediation sector (local banks) and to train private traders and farmers' cooperatives in modern marketing techniques. Provided that an appropriate institutional and regulatory framework is in place and competition among traders is strong, private traders are likely to be able to accommodate over time the need of small producers for commodity price risk management. Competition among traders is a precondition for forcing them to resort to marketing methods more favourable to farmers, including paying higher advances, (which can be sustained by the use of options) or providing faster payment (which can be made possible through the use of futures).

50. The potentially important role of cooperatives and other farmers' associations in providing access to risk management for small farmers needs to be emphasized. Individual farmers are highly unlikely to gain direct access to risk management markets, but farmers' associations, through the provision of price guarantees and, if they so desire, the operation of stabilization funds, can provide them with indirect access. Private traders can also benefit from self-organization - for example, the provision of guarantees against default by an association of exporters can help to make a country's exporters more reliable in the eyes of potential buyers. Financial intermediaries, in particular domestic banks, also need to be strengthened.

51. To develop the above types of activities will require a reorientation of government policies in many, if not most, developing countries and economies in transition, as well as major training efforts. But without such efforts farmers will remain vulnerable to price volatility, especially price falls, the power of large foreign trade houses will be strengthened while locally-based traders will be prevented from functioning properly, export receipts at the country level will be less stable and probably lower than otherwise possible, and governments will continue to be confronted with unexpected and difficult-to-manage price shocks. The social and economic consequences of neglecting to develop mechanisms for price risk management, as an alternative to minimum producer price policies and as a way to improve the reliability of a country in international commodity trade, can indeed be large.

Annex I

THE RISKS OF RISK MANAGEMENT AND WAYS TO COPE WITH THESE RISKS

1. Risk management instruments are potentially powerful instruments to obtain more price security, secure budgets, improve marketing, and enhance access to credit, but they are also potentially dangerous if not used prudently. Several risk management instruments have very high leverage. That is, with a relatively minor financial input, one can make major profits. One can also make major losses. Most people would think they would qualify for the first category, but in reality, experience shows that up to 95 per cent of speculators (that is, those who undertake risk management transactions in the hope of gains if prices move in the right direction) make losses in the long run. Speculative losses are in no way limited to unsophisticated users. Large losses in recent years include companies⁴² such as Allied Lyons, a major British food concern (an estimated loss of US\$ 269 million in foreign exchange speculation); Showa Shell, Japan (US\$ 1.05 billion lost in foreign exchange speculation); Germany's Metallgesellschaft, a large mining and trading concern (losses of over US\$ 1 billion in the oil futures, options and swaps markets); and Codelco, Chile's state-owned copper mining company (more than US\$ 200 million losses in the copper, gold and silver futures markets).

2. While these experiences should caution anyone from approaching the issue of risk management imprudently, they should not be used as an argument against risk management. Commodity prices are highly volatile, and if one does not manage one's risks, high losses are also possible - be it in physical trade or otherwise. Thousands of companies throughout the world are using risk management markets without running into major problems. But risk management activities have to be properly set up, within a good company control and management framework. This should prevent legitimate hedging from turning into excessive speculation. Excessive speculation can result from three types of problems. First, incompetence is a frequent source of trading losses. Traders may mistakenly take the wrong side of the deal (selling a contract when they should be buying one), or they buy contracts that are open to the risks of market manipulation (spot month contracts). Such a mistake initiated the huge loss of Codelco, mentioned above, which was exacerbated because the systems of checks and balances within the company were not properly adhered to. The second, and most important, source of problems lies within the company's management. The tendency to think that one knows better than the market is often large, and the result may be that one takes excessive positions without taking into account the risks that these positions imply. If no proper systems are installed within the company to evaluate these implicit risks, or the management ignores these indicators, the company may after some time find itself in a position of large losses - the situation of Metallgesellschaft. The third possible problem, less frequent than one might think, is fraud and embezzlement by the trading staff. Ways to avoid such abuse are quite well known, and not very difficult to implement.

3. In conclusion, the management of entities using risk management instruments should take its responsibilities seriously: set up a clear risk management strategy; determine trading limits; create the needed competence throughout the company; create absolute and clear rules within the company; distribute responsibilities in such a way that people can be held accountable for their actions; provide and enforce stringent control mechanisms; provide for proper risk analysis and evaluation methods; and maintain, as managers, tight supervision of risk management activities. This is, necessarily, a time-consuming process.

⁴² Simon Brady, "Allied-Lyons' deadly game", *Euromoney*, April 1991; Kim Hunter, "Shell's poor Showa", *Futures and Options World*, April 1993; See for example "MG's financial crisis illustrates dangers of inattentive hedging", *Oil Daily*, 11 January 1994; "Metallgesellschaft - not so clever", *The Economist*, 15 January 1994; and "Codelco says error cost it \$200 million", *International Herald Tribune*, 31 January 1994; "Fraud charges for Codelco trader", *Futures and Options World*, April 1994.

Annex II

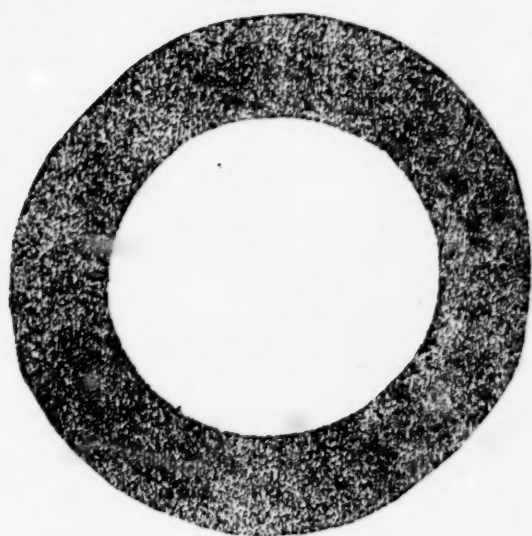
BASIS RISK ASPECTS OF RELEVANCE TO THE USE OF COMMODITY FUTURES AND OPTIONS BY DEVELOPING COUNTRY PRODUCERS

1. Before deciding to use an organized risk management market, exporters need to identify whether or not there exists a useful price risk management market. For example, the fact that there is a cotton futures market in New York does not imply that cotton exporters from Francophone West Africa or Uzbekistan can viably use this market to manage their risks. The correlations between New York No.2 cotton prices and the spot prices received for the cotton from these countries are low, and hedging would bring relatively low benefits in terms of reduced earnings volatility.⁴³ The New York exchange has recently introduced a contract based on northern European cotton prices, which provides lower basis risks for these cotton-exporting countries, but the liquidity of this contract is still so low that it is doubtful whether this new contract can be used for large-scale hedging of a country's cotton exports. Cotton exporters from many countries thus are faced with the problem that even if they want to hedge, there are no futures markets which are really useful for them. The problem may be less acute for commodities for which the world market is better integrated (e.g. cocoa, coffee, sugar, many metals), but still, developing country entities will have to determine on a case-by-case basis whether the spot prices for their commodities move in a way similar to those on futures markets.⁴⁴

2. Basis risk problems can be overcome on the over-the-counter market, as long as a viable reference price mechanism exists (as is the case, for example, for cotton). Intermediaries such as banks and brokerages can tailor-make a risk management instrument for the needs of the developing country. This type of tailor-made product is offered in oil markets, but it is still very rare in other commodity markets. For example, instead of managing the price risks of fuels in the United States (which is, implicitly, what one does when using the New York Mercantile Exchange contracts), one manages price risks of the Far East market, where the country in question buys its fuels. The intermediary lays off its main risk on the New York market or in any other way, and carries the basis risk itself until it has found another party which is willing to take it on. Whether this type of tailor-making will be expanded to non-oil markets in the near future is very difficult to say; to a large extent, this may be a chicken-and-egg problem, and in this respect, international organizations may serve the role of catalyst for getting such markets off the ground.

⁴³ P. Varangis, E. Thigpen, S. Satyanarayan, *The use of N.Y. cotton futures contracts to hedge cotton price risk in developing countries*, World Bank, International Economics Department, International Trade Division, 4 January 1994.

⁴⁴ Several studies of this kind have been done by the World Bank. See, in addition to the study mentioned above, Stijn Claessens & Panos Varangis, *Hedging crude oil imports in developing countries*, World Bank, International Economics Department, WPS 755, August 1991; and several of the papers discussed in M.L. Debatisse et al., "Risk management in liberalizing economies: issues of access to food and agricultural futures and options markets", World Bank, Europe & Central Asia Regional Office; Middle East & North Africa Regional Office, 12220 ECA, 30 November 1993.





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COUNTERPART AND SOVEREIGN RISK OBSTACLES TO IMPROVED ACCESS TO RISK MANAGEMENT MARKETS: ISSUES INVOLVED, PROBLEMS AND POSSIBLE SOLUTIONS

Report by the UNCTAD secretariat

This report is to a large extent based on inputs provided by Bankers Trust Company, London. Other significant sources include a paper provided by E.D.&F Man (Sugar) Ltd., London, and "Legal and regulatory aspects of financing African coffee exporters and the provision of bank hedging line credit", prepared for an UNCTAD workshop in Nairobi, Kenya, November-December 1993, by Mr. Nicholas Budd of White & Case, Paris. Information was also given by Investment Insurance International, Lloyds Chambers in London; and several of the major international commodity trade houses and major merchant banks involved in commodity trade finance and the provision of commodity price risk management instruments. The presentation of the information in this paper, as well as the interpretation and the conclusions formulated, are entirely the responsibility of the UNCTAD secretariat.

This report is rather technical and presupposes a good knowledge of

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INTRODUCTION

1. In the proposals of the Group of Experts on Commodity Exchanges, as endorsed by the Standing Committee on Commodities at its second session (February 1994), the UNCTAD secretariat was urged to undertake in-depth research on problems facing, in particular, entities from developing countries and economies in transition, in gaining access to commodity price risk management markets.¹ The two studies that have been prepared for the Ad Hoc Group of Experts on Risk Management in Commodity Trade treat two complementary sides of these access problems. This document discusses issues related to acceptability of entities from developing countries and economies in transition to intermediaries providing access to international risk management markets, and access problems related to counterparty and sovereign risks.

2. Counterparty risk factors, and in particular sovereign risks, are a major obstacle to the use of risk management instruments by entities from developing countries and economies in transition. Such risk factors come into play every time that an institution such as a trade house or a bank provides credit in some form or another. Thus, it is difficult to separate the discussion of risk management transactions from that of general credit transactions. The discussion below, therefore, has wider implications than only risk management: the same factors that improve access to risk management markets can also improve access to other credit markets, such as those for trade finance.

3. The issue of credit is basic to the use of risk management. Usually, producing or consuming entities cannot afford to immobilize for the purpose of managing risks the convertible currency which they would normally need for upfront payments or for maintenance margins. Therefore, as long as they are required to provide all the funds needed to run a risk management programme, they will for all practical purposes be prevented from using risk management markets. They will be able to make systematic use of risk management markets only when they have access to some form of credit. By its very nature, the management of price risks of physical commodities should allow easier access to credit: a future flow of commodity sales can be discounted to its present net value (which is rather certain once price risks have been taken care of), and then, the credit received in effect amounts to a partial pre-payment for future commodity deliveries; as long as delivery of the commodities takes place, the loan is automatically repaid. But there are fundamental reasons why so little use has been made of this possibility to date. A number of problems intervene, and some difficult conditions need to be met.

4. One of the principal problems is that when a risk management transaction contains a credit component, the provider of the risk management instrument automatically runs a risk of default. The following examples illustrate this for a number of risk management transactions of potential interest to developing commodity entities:

- * A government entity storing goods could, through the premiums earned when selling out-of-the-money call options over-the-counter, reduce its costs of storage. If prices increase and the options are exercised, losses will be compensated by an increase in value of the commodities stored on the option transaction. However, the buyer of the options runs the risk that the benefits of higher prices for the commodities will not be used to pay him

¹ "Analysis of ways of improving the efficiency and use of existing mechanisms for the management of risks arising from commodity price fluctuations - Proposals of the Group of Experts on Commodity Exchanges", TD/B/CN.1/10/Add.1, 27 September 1993.

² The companion paper concentrates on the issue of national structures and institution building necessary for allowing access to international risk management markets to those exposed to commodity price risks in agricultural markets.

his dues. If the buyer is not provided with real physical collateral (e.g. title to the stocks), the buyer of such options will effectively be providing credit to the option seller.

- * A ministry of finance interested in securing its budget, which relies heavily on (export) taxes on a certain commodity, could enter into a swap for this commodity, switching its exposure from floating prices to fixed prices. If prices decline, tax earnings will decrease, but this will be compensated for by payments from the provider of the swap. If prices increase, the ministry will be forced to give up its higher tax earnings to pay the swap provider. Through the swap, the swap provider has put himself into a position to benefit from higher prices. However, as he has no direct access to the extra earnings resulting from higher prices, he relies on the performance of his counterpart for being paid. Thus, he will need either to provide the equivalent of a credit, or to be secured with sufficient collateral.
- * A ministry of planning could be interested in locking in a fixed exchange rate for its oil imports in terms of its commodity exports. For example, for the coming three years, the export of one bag of coffee should be sufficient to buy ten barrels of oil, without entering into any barter agreement. This goal can be reached through two separate swaps, or alternatively through a cheaper but also more illiquid direct coffee/oil swap. Again, the risk of the swap provider is that the government defaults when prices move adversely. The swap provider will either have to accept this risk, or obtain sufficient collateral (e.g. control over the earnings from part of the coffee exports).

5. Developing country entities can try to obtain credit lines from brokers for operations on organized exchanges, but the amounts currently available are limited. In general, brokers do not have the capacity to set up and monitor complex credit and security arrangements for guaranteeing large credit lines - their brokerage margins are simply not high enough. They could provide credit lines against money-centre bank letters of credit, but such letters of credit are difficult to obtain for developing country commodity exporters. Nevertheless, developing country companies can often maximize their access to broker credit lines by working with several brokers simultaneously. They can also build risk management clauses into their physical trade contracts, in which case the trade house with which they deal takes care of the cash-flow elements of risk management - at an often not very transparent cost. Although counterpart and sovereign risk issues intervene in this latter type of arrangement, it is not the main focus of this report. Rather, the report concentrates on ways in which access to credit can be enhanced through over-the-counter instruments and on possibilities for improving the supply of letters of credit. Over-the-counter instruments, through their tailor-made character, are especially suited to playing a credit-enhancing role. If they are properly structured (e.g. including the collateralization components mentioned in the previous paragraph), over-the-counter instruments may require little or no upfront cash payments and, in particular, they can serve to insulate clients from the need for urgent cash transfers which can intervene when using exchange-traded futures contracts; thus, they can enable a relatively wide range of entities to manage their price risks.

6. The report examines how counterpart and sovereign risk factors impact on the provision of credit lines and over-the-counter risk management instruments to entities from developing countries (or economies in transition),³ and then addresses the potential roles that can be played by private sector entities and governments in developing countries or economies in transition, as well as by the international community, in mitigating or avoiding the effects of these risk factors.

³ This report discusses the risks that doing business with developing country counterparts causes for banks, trade houses and brokerage companies. It should be noted that developing country entities also face counterpart risks when selecting their developed country counterparts. For example, the Central Banks of Portugal and former Yugoslavia both lost the gold that they had lent to Drexel Burnham Lambert, one of the world's major brokerage houses, during the 1980's when this company went bankrupt.

Chapter I

COUNTERPART AND SOVEREIGN RISKS

7. Any deal with a credit component carries with it a risk of default by the counterparty. For example, all imports which have not been paid for upfront carry such a credit component, as do all advance payments or campaign credits for exports, all direct, non-structured loans and many structured loans, and a large number of risk management transactions. In all these cases, the entity providing the credit has a risk of making a loss when its counterparty fails to meet its obligations.⁴ Typically, the provider of a credit to a commodity exporter faces several different areas of risk, including:

- * In the case of credit to an exporter (or credit secured through exports), will the goods or commodities be produced in the required quality or in the right quantity at the agreed price and on time ?; or if the exporter needs to obtain foreign currency to meet his obligations, will this foreign currency be made available in the amount needed at the right time ?;
- * Will the government agency directly or indirectly responsible for policy allow the export even if export licenses have been granted ?;
- * Will the government itself still be in power when shipment is to be made, or will a new regime renege on its predecessor's obligations ?

8. Default on risk management deals can result from company-specific factors. However, when developing countries (or economies in transition) are involved, very often, it results from country-specific factors. Trade houses and banks consider it part of their normal business to take on company-specific risks (also called "market risks"). They invest in building up good relations with possible counterparties and in finding out more about how these counterparties function; they will avoid or at least severely restrict taking on the market risks of unknown counterparties, and they will spread out risks over a portfolio of counterparties.⁵ On the other hand, to the extent possible they tend to lay off country-specific risks. Company-specific defaults on deals with risk management components can be the result of a bankruptcy, but more often they result from a lack of understanding about the implications of certain price clauses in physical contracts, the working of risk management instruments, or the implications of the use of certain risk management contracts. Many risk management transactions are designed in such a way that, in order to pay for price protection, companies have to give up (part of) their upside potential; when prices then move upward, management is confronted with the need to give up part of the potential extra earnings, but may refuse to do so.

⁴ Counterparty risks are additional to other risks that credit providers run, such as liquidity risks (the risk that at a given moment, liquidity on the market on which part of the price risks are laid off is so low that the market becomes useless), or legal risks (the risk that the risk management transaction is declared illegal - this is reported to be the largest single source of losses on swaps).

⁵ This explains to a large extent the dichotomy in soft commodity trade houses which has occurred in recent years, with most medium-sized trade houses disappearing. Large trade houses which are able to have offices or agents in many countries, and highly specialized traders which invest in knowing sufficiently about a handful of countries have remained. The "counterparty discovery costs" for medium-sized traders have simply become too large, especially since the export structure of most countries has become rather fragmented.

9. Even if a company is perfectly viable, efficient and well-capitalized, and has entered into a risk management transaction fully aware of its implications, it may default on its commitments as a result of certain government decisions. For example, a central bank or other regulatory agency may decide that the commodity prices which are the implicit result of the commodity risk management clause in a contract are too low, and that the deal therefore is illegal. Or governments can block the obtaining of foreign currency for the payment of guarantees or financial obligations.

10. The risk of counterparty defaults is one which banks and trading companies have to take very seriously. Many smaller trading companies have gone out of business because of counterparty default, and such defaults have often led to massive losses for larger trade houses and banks. A not unimportant number of such counterparty defaults by entities from developing countries, and to some extent also from economies in transition, were due to government policies or changes therein. Taking such risks is essential to doing business, but companies have learned that they have to monitor these risks properly and, to the extent possible, build in safeguards against default. Many problems resulting from improper monitoring and evaluation of counterparty risks occurred in the late 1980s and early 1990s, with two results. Firstly, trade houses suffered a decline in their own capital, and an increase in their reliance on banks. Banks traditionally have stricter rules on counterparty evaluation than trade houses. Secondly, many banks have withdrawn from commodity financing, and those that remain have become much stricter in their counterparty risk evaluation procedures, cutting credit lines for many countries, and tightening up their credits and credit policy towards trade companies. In particular, they have moved from an overall evaluation of credit lines for a trade company, to an evaluation of the risks involved in every underlying deal. The consequence of these two parallel developments has been that in recent years, developing country counterparts have increasingly been subjected to the very strict rules and requirements imposed by banks, and the resultant increase in the necessary paperwork for every deal. The capacity of developing country entities to conform to these stricter policies, on the other hand, has often deteriorated, partly because of the decentralization and liberalization of marketing structures.

Chapter II

THE RATIONALES FOR USING OVER-THE-COUNTER RISK MANAGEMENT INSTRUMENTS

11. Traditionally, commodity price risk management was often implicit in marketing deals: such deals stipulated long-term fixed prices, at times for a period of several years. Such fixed price contracts formed an essential part of the trading strategy of a number of the major primary commodity exporters. Given a secure counterparty, they provide guaranteed access to a market at guaranteed prices, for a certain portion of exports or imports. For instance, in the case of sugar, fixed-price long-term contracts accounted for a large part of exports of Australia, Brazil and Fiji, and for a large part of imports of China, Japan and Malaysia. Counterparty risks presented the major risk attached to these long-term fixed price arrangements, and defaults did at times cause very large losses. Several major trading houses as well as a number of smaller, specialized traders collapsed in the late 1980s and early 1990s through a combination of defaults by state-owned entities (or resulting from direct government interventions) and risky trading (often induced by the pressure to recuperate the losses due to these defaults).

12. Nowadays, long-term fixed-price marketing deals are rare, partly as a reaction to past defaults, and partly because of changes in marketing structures for many commodities. Although at times short-term option clauses are included in marketing deals, and various marketing mechanisms can be used to replicate risk management transactions, most entities which manage their price risks now do so directly, not through their physical trade contracts. If an exporter and an importer both enter into a commodity swap, both will receive or pay a fixed price for a period of, if they wish, several years; but the counterparty risk of an importing trader is no longer towards an exporter (and vice versa), but towards a major international bank. With a bank interposing itself between importer and exporter in a commodity swap, both will still have the benefits of fixed prices, but without any real counterparty risk exposure (as the banks involved in general have excellent credit ratings).⁶

13. This does not mean that risk management contracts are now largely traded on a stand-alone basis. Rather, they have shifted from being directly linked to physical trade to being linked to trade finance or investment finance. To a certain degree, there has been a progress from price risk management in physical trade contracts to independent risk management through brokerage companies. But in many cases, and in particular for longer-term risk management instruments, risk management is in one way or another part of a financing deal. In effect, the financing transaction is often the drive behind a deal, and risk management components are later built in to improve the terms and conditions of the financing. Indeed, in the case of developing countries, most use of medium (6-12 months) and longer-term risk management instruments is linked to trade finance or investment transactions.

14. The use of risk management instruments in developing countries is still in its infancy. This is despite the significant exposure to commodity price fluctuations of many groups in developing countries (producers, exporters and governments), despite the fact that those without access to risk management instruments suffer a competitive disadvantage in selling their product compared to those who have such access, and despite the fact that use of risk management instruments can help to reduce trading costs, including "invisible" costs such as costs of credit or insurance costs. For example, many developing countries maintain significant stocks of commodities. They tend to finance this storage entirely themselves, without drawing any significant benefits from this practice; they only benefit from the commodities at the moment that they are sold abroad. However, the commodities concerned are in principle very good collateral for obtaining foreign loans, at lower rates than the loans they now rely on for trade finance, and foreign parties could be made to pay for part of the costs of storage through a variety of modern financial instruments.⁷ This is also

⁶ The banks make a profit in their bid-ask spreads (in this case, the difference between the price quoted to the importer, and the price quoted to the exporter). These spreads used to be rather large in the early years of swaps, e.g. for crude oil up to US\$ 1/barrel for a 2 to 3 year swap, but have now declined radically in the more liquid markets (e.g. for crude oil to 15-25 cents/barrel for a 2-3 year swap; this puts the implicit "commission costs", shared by exporters and importers, at 0.3 to 0.5 per cent of the underlying physical trade value of the transaction). As long as those entering into swaps do this on an occasional basis and for strategic reasons (for example for locking in a price that would ensure their operations' profitability) there are no real organizational costs of using these risk management instruments, apart from the training required to ensure that management understands the consequences of the deals entered into. Only when companies start to trade swaps or other over-the-counter instruments actively is there a need for installing new and strong external management control structures.

⁷ The only significant exception to this is gold. Several developing country central banks have understood that they can earn interest on this asset, through a choice of techniques including the writing of call options and lending gold to the market. Nevertheless, even this practice is not common, for reasons such as lack of understanding, legal barriers, and political obstacles. Indeed, quite a few of the transactions which have been done so far have been deliberately kept out of the public eye.

radically different from the situation in developed countries, where financing based on the storage of commodities is much more prevalent and confers large benefits to a wide range of companies. Banks are in principle very interested in providing loans against these stocks, as long as they can properly structure the deals to reduce default risk.⁸ When providing stock finance, they will often insist on including a risk management facility, for which they then automatically provide the needed credit lines. The failure to use commodities in order to obtain more and/or cheaper finance is due to a number of factors. For one, inventory financing is much more easily available in developed countries than in developing countries and economies in transition, because of the presence of a well-developed banking infrastructure. Also, while developed countries provide the necessary legal infrastructure, in other countries this has to be created on a case-by-case basis.⁹ This problem could be addressed by governments through their instituting the relevant standard documentation, and by clarifying the country's legal system.

15. As has been noted in an earlier study,¹⁰ risk management instruments can help developing countries gain access to finance, and/or significantly improve the terms on which financing is secured. This is because through risk management, they can enhance the collateral value of their commodities. Consider pre-export finance. It is often highly attractive for a trade house to provide its developing country counterpart with pre-export finance in order to finance crop purchases, machinery and spare parts for processing facilities, etc. This is often essential to allow the counterpart (exporter) to function properly, and it helps the counterpart to reduce its transaction costs: in the absence of pre-export finance, the exporter will be forced to borrow on the local market, where credit is often scarce, and interest rates are much higher than on the international market.¹¹ A pre-export credit can be structured in such a way that it is legally speaking an advance payment for future exports of a commodity. Typically, in such a collateralized pre-export purchasing deal the exporter has the right to re-purchase the commodities prior to the export date for an amount sufficient to reimburse the loan, or alternatively, the lender will allow the exporter to sell the goods abroad and repay the loan from the proceeds of the sale.¹² The commodities provide the collateral; but they will only be good collateral if their value is secured, through price risk management. Exporters which have a risk management element in their pre-export financing arrangements will thus be able to borrow more against the same level of exports and borrow for longer periods.

16. Risk management can also improve the terms of project financing by reducing its risks. When risk management is added to a normal financing project, the providers of the finance are often able to expand the amount of finance available and/or improve its terms.

⁸ Banks will not make any extra profits when the value of the commodities in stock (or the commodities to be produced) increases, while they are exposed to the risk of a complete loss when the value of these commodities decreases. Thus, they are naturally interested in managing price risks.

⁹ See N. Budd, "Financing operations for commodity producers", *International Financial Law Review*, January 1991.

¹⁰ UNCTAD/COM/15, 15 March 1993, chapter III.

¹¹ In addition, for exporters, it is normally prudent to finance working capital in the same currency as is to be received for sales, to reduce currency risks.

¹² See Nicholas Budd, "A guide to pre-export financing of physical commodities in origin countries", *International Financial Law Review*, January 1991. It should be noted that in practice, it is more common to build this purchasing facility into a "countertrade" facility: the trade house provides priority goods such as fuels, agricultural inputs or machinery, and is later reimbursed through the sale of certain export commodities.

17. In the case of importers, risk management can also help to make financing more viable, because it helps companies to budget their expenses properly. For example, when it manages its price risks, a grain importing agency financed from the government budget knows how much it will have to pay for the cereals it plans to import the coming year, and thus, whether the funds to reimburse a foreign loan will be available or not. This makes it easier for a bank or trade house to provide longer-term credits.¹³

Chapter III

EVALUATING THE CREDIT RISKS OF RISK MANAGEMENT TRANSACTIONS

A. Characteristics of credit risk in risk management transactions

18. Risk management transactions often contain a credit component. However, they are different from other types of credit transactions because their marked-to-market value (their change in value compared to the approximately zero-value that they had when the parties involved entered into the transaction) is lower than the nominal value of the transaction;¹⁴ secondly, the "netting" of transactions between various counterparties helps to reduce overall exposures (implicit profits on some deals help to offset losses on others); and thirdly, the risk exposure can be reduced relatively easily through a system of margin payments.

19. The credit risk of a risk management transaction is therefore considerably smaller than the nominal value of the deal. This risk is expressed in a credit equivalent, which can be taken as the maximum expected replacement cost of the contract (with a 90 to 99 per cent certitude, in statistical terms). This makes it possible to compare the "credit content" of a risk management deal with direct loans (which are 100 per cent credit), and thus to compare the two for reasons of decision-making and allocation of resources. The credit equivalent of a risk management deal will be relatively large when one final payment is foreseen at the end of the transaction, and relatively small when regular payments are made.

B. Risk evaluation procedures

20. Large trading houses and banks regularly evaluate the risks of doing business with possible counterparties and their countries of origin. Companies

¹³ Note that currently, many developing countries import grains through preferential arrangements, at prices which have little to do with the world market prices as quoted on the main grain futures markets; thus, the management of grain price risks is currently of little relevance to most public grain importing agencies. This is likely to change soon, when the decisions of the Uruguay Round start coming into effect.

¹⁴ In a perfectly competitive market, the value of a risk management transaction should be close to zero at the moment that the transaction was initiated: that is to say, expected payments (plus transaction costs) should more or less equal expected earnings. When prices (and thus, price expectations) start to move, the financial transaction will start showing a "net value" (or "marked-to-market value") positive for either the bank or its client: expected earnings over the life of the transaction will exceed expected payments, or vice versa. Prices are unlikely to move so much that this net value will exceed the nominal value of the transaction: the experience of banks shows that this marked-to-market value of a very large share of swaps (the most common over-the-counter risk management transaction) falls within plus or minus 15 per cent of the nominal value of the swap. Regulatory requirements in a number of countries, which oblige swap providers to stipulate maximum price bands beyond which no supplementary payments need to be made, also limit the maximum marked-to-market value of swaps.

and countries are assigned risk ratings; a company risk rating can be the same as the rating of the country in which it has its base (which is the case for state-owned companies), or it can be lower (in general the case for private companies). The higher the risk, the higher must be the rate of return to induce the trade house or the bank to provide a credit.

21. Country ratings are determined by factors such as political and social risks (including the quality of the political leadership and of the bureaucracy, and the consistency of economic policies); economic and financial risks (including factors such as the diversity of exports and direction of trade, and the past record of the country in terms of external payments and fulfilment of contractual obligations); economic growth momentum; long-term growth potential; and volatility of GDP and prices (countries dependent on only a few commodities normally rating low in this category). Governments can influence their ratings, sometimes at relatively low costs. For example, they can publicize the improvements they have made in the legal system governing international trade; or they can encourage the reduction in the volatility of export and import prices through risk management. However, there are few indications that governments actually make efforts to directly influence the risk ratings assigned to them by trade houses, banks and insurance companies.

22. A company's risk rating is better than the rating of its country of origin only when the company can prove independent access to foreign exchange outside the country. In all other cases, its rating is at most as good as the country of origin's rating, and generally lower. Deductions result from the level of business risk within the country, the company's track record, the nature of its business, and the assumed quality of its management. The company ratings provided by Moody's and other rating agencies provide one source of such counterparty risk ratings. However, most developing country entities do not have such a formal rating, and banks and trade houses have to make their own estimates.

23. The expected return of a credit transaction is compared to the country and counterparty risk inherent in it.¹⁵ Structuring the transaction (as discussed below) can reduce its overall risks. Whether or not a transaction for the trade house or bank will be acceptable will primarily depend on the expected return, but may also be affected by the overall country credit line.

C. Country credit lines

24. Banks and trade houses prefer not to be overly exposed to one or a limited number of companies, countries or commodities: they tend to build up a portfolio of risks. Country credit lines are used to define the maximum exposure a lender wants to have to any one country. These credit lines are generally determined on a regular basis, e.g. from year to year, on the basis of country and counterparty risk reports which are compiled and collated regularly. These limits are normally not amended within the course of the year. Banks and trade houses may operate one overall credit ceiling for pure credit transactions and for risk management transactions, or they may operate two different credit lines. Even large banks often determine rather limited credit lines: for a typical sub-Saharan African country, the credit ceiling for risk management transactions may be as low as US\$ 5 to 10 million.

¹⁵ In the case of swaps with developed country counterparties (that is, swaps with counterparties which have official ratings of Moody's, Standard & Poor's or another rating agency), the link between expected return and counterparty quality is often made formal: when the counterparty is downgraded by the rating agency, either the implicit interest paid on the swap is automatically raised, or the swap is automatically terminated.

25. To determine which part of this country credit line is taken up by a risk management transaction, the highest likely loss of the transaction (at present value) over its period of life is computed. As commodity prices are rather volatile, this value can be quite large. A one-year WTI (West Texas Intermediate) crude oil swap with a notional value of US\$ 20 million would carry a credit risk of around US\$ 700,000 (compared to only around US\$ 25,000 for a US\$ interest rate swap of the same notional value).¹⁶ In principle, banks and others can syndicate risk management deals in order to remain within their country credit lines. In practice, however, this is rather rare, as the market for commodity-linked financing transactions is still small. The individual country credit lines of the main banks will thus largely determine the possibilities of a country to enter into a risk management transaction. It should be noted that structured transactions, which provide a performance rather than a country risk, do not add to a country's credit ceiling.¹⁷ Thus, the security arrangements of a deal can be such that senior management decides to ignore the limit imposed by a country credit line (for example, when full collateral in the form of gold is put up).

D. Implications for offer of risk management instruments

26. Two main factors enter into the decision of a bank or trade house to provide a risk management arrangement to a private or governmental entity, whether in a developed or a developing country; firstly, the expected return of the transaction, and secondly, the country credit line. The expected return of a risk management transaction, corrected for the credit risks involved, and taking into account the expected time, human resources and expenses required to structure the transaction,¹⁸ is compared to the normal return on equity of the institution providing for the transaction. Various risk management providers, depending on how they correct for credit risks and on their returns on other transactions, can come to different decisions on certain risk management transactions. Even if the return on a deal may appear attractive, the country credit line may be so low that the transaction is impossible.

27. A third factor also plays a role: capital adequacy requirements to which banks and other financial institutions are exposed. The way these requirements are decided depends on central bank policy and varies from country to country. Usually, banks are required to make provisions against the possibilities of default on credits of one year or longer (and, as noted, many longer-term over-the-counter risk management instruments have an implicit credit component). Such provisions reduce the effective income from a transaction by imposing a higher cost of capital. The size of a provision depends on the risk category to which the deal is assigned, which in turn depends on whether the "borrower" is a private or public entity, which country the borrower is from, and the type of the posted collateral. For example, the Commission Bancaire in France, as well as its Canadian and Swiss counterparts, sets fixed percentages on provisions to be made against loan exposures to every specific country; the Bank of England

¹⁶ J.P. Morgan & Co., Inc. (eds), *Commodity linked finance*, Euromoney Books, 1992, chapter 4.2.

¹⁷ Most banks prefer not to structure deals as long as they are able to remain within their country credit lines: this reduces the cost of transactions, and provides them with additional profit opportunities.

¹⁸ Developing country governments and companies thus have an interest in learning about commodity price risk management: risk management providers tend to stay away from a country where they deem too large an educational effort is required. Investment by governments and companies in information systems (well-functioning telephones and faxes, Reuters terminals, and use of personal computers) will also be looked upon favourably by risk management providers.

issues recommendations in this regard. When the lender is from a country with a high sovereign risk, and no special provisions are made to post supplementary collateral, the provision the bank has to make can be relatively large.

28. All the above factors have important implications for the provision of over-the-counter risk management instruments to developing countries. In many cases, unsecured deals will be impossible for the bank (as they would exceed country credit ceilings), and even if they are acceptable to the bank, they may be difficult to accept for the client country: financial requirements are too large, or costs are too high. Solutions have been found by structuring a transaction: that is, building into the transaction a number of safeguards in order to provide the lender with, firstly, a clear repayment procedure and secondly, collateral that can be seized when the counterparty defaults. Many banks (which decide to a large extent also on the credit policies of trade houses) distinguish between pure credit risks (e.g. providing the confirmation of a local bank's letter of credit) and performance risks. Loans which depend for repayment entirely upon the performance of a commercial operation do not, for these banks, give rise to credit risk but only to performance risk. Loans depending on performance may be exempted from country credit limitations, and are analysed more in terms of an exporter's ability and motivation to perform its commercial obligations than in terms of country risks.¹⁹ Structuring a risk management transaction (or, for that matter, any credit transaction) helps shift part of the credit risk to performance risk.

29. When structuring a deal, two goals need to be met: first, a well-defined and feasible repayment procedure needs to be formulated; and secondly, sufficient security has to be provided just in case the counterparty defaults on his obligations. In order to structure a financial transaction related to commodity trade in such a way that these goals can be met, several conditions need to be met:

- * There needs to be a physical collateral. This implies, in the first place, that the commodity involved has to exist (in stock, in the form of mineral reserves, or in the form of crops in the field), or that its production is planned. Secondly, in order to be useful as a collateral, this commodity has to be exportable (non-exportable assets, such as a processing factory, are of very limited collateral value for international banks and trade houses). To ensure that this is possible, government regulations need to allow these exports, and it is necessary that there is a sales contract, preferably with either a well-known buyer, or alternatively with a small buyer who provides a letter of credit (few small buyers are in a position to do so, as banks are often willing to issue a letter of credit only once the intended clients of these buyers have done so, which is usually just 30-60 days prior to the physical delivery date).²⁰

¹⁹ See N. Budd, "Legal and regulatory aspects of financing African coffee exporters and the provision of bank hedging line credit", paper prepared for an UNCTAD workshop on government policies affecting coffee export marketing, Nairobi, November-December 1993.

²⁰ This latter factor explains why, in countries where commodities are exported through an auction system, it is difficult, though not impossible, to use these commodities as collateral for risk management transactions. The buyers on the auction, who are exporting the crops they buy, hardly have any need for risk management, or even for pre-financing: they can basically trade on a back-to-back basis. The local buyers (who bring the crops to the auction) are in need of pre-financing and risk management, but cannot sign any forward contracts for exports and thus cannot provide the necessary collateral. In order to allow such local buyers access to the international risk management (and pre-financing) market, a guarantee needs to be given that the proceeds of exports will go towards repayment of the obligations. If the auction system ensures the payment to producers, and the product is exported, the two halves can be put together through a government guarantee. This is done, for example, by the Turkish and Argentine governments for their tobacco auctions.

- * The collateral needs to be protected against the risk of disaster (drought, flooding, sabotage) and political risk. Insurance against both types of risk, in United States dollars or another convertible currency and payable to banks or traders outside the exporting country, needs to be available.
 - * The commercial and bankruptcy laws of a country should be in order: a bank should be allowed to seize, without too much delay, the collateral if the counterparty defaults.
30. It is rather complicated to structure risk management deals in such a way that credit risk is mitigated. This can be exemplified by the amount of documentation that is required - over a hundred pages of contracts, guarantees and other forms are no exception. Countries and companies which are not ready for such documentary requirements are badly placed to access the international risk management market.

Chapter IV

WAYS TO OVERCOME CREDIT RISK PROBLEMS IN COMMODITY PRICE RISK MANAGEMENT TRANSACTIONS

31. For most commodities traded on organized exchanges, a few developing country entities have been using futures and options, but largely on the basis of upfront payments. Credit lines have been extended in only very limited amounts, and mainly for large, state-owned companies with a good track record. Over-the-counter commodity price risk management deals have also been done in developing countries, mainly for crude oil, fuel products, gold, silver and copper, and for a rather diverse group of countries including Algeria, Angola, Argentina, Congo, Ecuador, El Salvador, Ghana, Mexico, Nigeria, Papua New Guinea, Thailand and Trinidad and Tobago. But overall, the use of risk management instruments has been limited, due to a number of factors: lack of understanding on the part of government policy makers; lack of knowledge and organizational problems within the companies/entities which would benefit from risk management; a sometimes inappropriate division between those who would potentially benefit from risk management and those who are paying for it (for example, this is the case when the company involved is not allowed to keep its own foreign exchange, but has to cede it to the central bank); an inappropriate legal framework; and country policies, including policy on foreign exchange controls. However, a further problem has been the inability of the agency providing the deal to structure it in such a way that what is offered is acceptable to the developing country entity, while the security obtained is sufficient to overcome the agency's sovereign risk barriers.

32. High upfront premiums, the posting of a collateral which is large in comparison to the nominal value of the transaction, and the paying of a relatively high rate of implicit interest on the capital provided will in general be sufficient to induce a trade house or a bank to extend a credit, including the credit implicit in a risk management deal. None the less, the terms of such a credit are likely to be costly and thus unacceptable to the developing country entity. However, better terms are possible only when conducive conditions are put into place by the company and the country involved. The major such conditions are discussed below.

A. Track records and company information

33. Institutions providing risk management facilities generally require full information about the company which would be its counterparty, to determine, for

example, whether the company is viable and well-managed. Thus, information on a company's track record is required. Potential counterparties which have defaulted on contractual agreements with overseas parties are unlikely to be considered for a risk management transaction with a credit component. They must also have a good reputation for meeting their financial obligations vis-à-vis suppliers, customers and lenders. The commercial strength, reputation, credit rating and payment record of not only the direct counterparty, but also of all other parties involved in the production, delivery and marketing of the commodity concerned are also analysed. The provider of a risk management instrument also needs to be convinced that the entity is properly managed and has the financial structure to execute its obligations.

34. Providers of risk management facilities also need to determine whether the distribution of costs and benefits of the risk management is such that those bearing the risks have the incentives to manage them (if not, the risk management programme may not be executed). Information in this respect should include details on the levels, timing and computation of taxes by the government and on subsidies and other payments. For instance, if the prices for oil products than a state-owned refinery is allowed to charge are determined on the basis of the average import prices of crude oil (as is the case in many countries), the management of the price risk of oil imports may be of interest to the government but the refinery itself bears no price risks and thus has no incentive to manage a risk management programme. If a risk management programme for a state-controlled importing agency is secured through exports by another state-controlled agency, then this second agency must be able to benefit from the transaction in one way or another (that is, the government needs to set up an appropriate system for internal financial transfers).

35. Getting to know a counterparty is thus extremely important for providers of risk management. Developing country companies intent on implementing a risk management strategy may do well to invest in building up a good relationship with one or more providers of such instruments. In many cases, it may be easiest to start by buying an option (or an option-related instrument), which entails no default risk for the option provider. As the relationship develops and a positive track record is established, the option provider may become more comfortable with taking on the credit risk of its counterparty.

B. Countertrade

36. Many of the traditional sources of credit (commercial bank credit; trade credits; export agency insurance; forfaiting) have dried up for developing countries. The various forms of countertrade and barter have remained as relatively good carriers of credit to developing countries. Risk management deals can be included fairly easily within such countertrade and barter deals, because among other things escrow accounts, a main vehicle for securitization, are often part of the arrangements for countertrade. Also, sovereign risk insurance for countertrade deals (see section F) is relatively easily available and relatively cheap.

C. Offshore margin accounts

37. Virtually no developing country company is in a position to obtain access to risk management instruments without providing some form of security. One major way in which this security is structured is through the opening of an offshore account - hence, if national regulations make such an offshore account impossible, companies will in most cases be prevented from accessing international risk management markets. Funds need to be maintained in this offshore account as security. Usually, counterparties are asked to deposit an initial margin, and then to maintain a variation margin if either prices or

credit conditions move adversely (that is, their position is marked-to-market). The offshore account is normally interest-bearing. The highest level of collateral is normally required at the beginning, and funds can be gradually released as time goes by. The offshore account can be started with a cash deposit, or with the proceeds of one of the country's main exports (normally, but not necessarily, those of the commodity being hedged);²¹ for the time being, it is easier to use fuels and metals for this purpose than to use soft commodities, because banks feel more comfortable with the markets for the former. Thus, for example, the proceeds of one month of exports could be assigned to an offshore account, and then serve as a guarantee for a one-year swap with quarterly payments.

38. Take, for instance, the case where an exporter wants to put a floor on the prices he receives, i.e., wants to protect himself against the risk of price declines. This is equivalent to the purchase of a put option, and does not carry any counterpart risks for the company which sold the option. However, the premium costs of such an option for the exporter can be high, and he can subsidize the put option by selling a series of call options. When he sells call options, the company buying these options will be exposed to counterpart risks, and will normally insist on security. As the risks that the exporter carries on the options are fully covered by his physical exports, if the proceeds of a sufficient part of these exports are credited to an offshore account held or controlled by the company which bought the options, virtually all credit risks are eliminated.

39. In a similar way, countries can organize the price risk management of their imports. For example, a country which heavily depends on exports of cocoa and coffee, but imports fuels, can effectively lock in a maximum amount of cocoa/coffee to be paid for every barrel of fuel. The country would buy call options on fuels and put options on cocoa or coffee, and in order to reduce the costs of the transaction, simultaneously sell call options on cocoa or coffee (giving up part of the potential to profit from export price improvements). To securitize this deal, part of the proceeds of the cocoa/coffee exports would have to be credited to an offshore account. If the organizations importing the oil and those exporting the soft commodities are different ones, the links between them need to be strong in order for such a structure to be acceptable to the company buying the call options. For example, both could be state-owned companies subject to the authority of the government (which may then be required to guarantee the transaction). Independent exporters may object to these deals as they would be exposed to a risk of default by the importer, and would face delays in their payments due to a partial retention of their receipts. Also, the timing and level of compensation paid by the importer to the exporter may create problems.

40. The disappearance of marketing boards for soft commodities in many countries makes this type of securitization arrangements for import prices increasingly difficult. Although importers could still sell put options to reduce the costs of their purchases of call options, the risk management providers will insist on some form of credit guarantees. If it is impossible to have an exporter provide this guarantee, the importer may well be obliged to provide cash collateral upfront.

41. In principle, offshore accounts are easy to set up, but obstacles can occur, especially when the cash collateral is expected to be built up through retention of export proceeds. One of the most frequent obstacles is foreign exchange controls, such as export retention schemes which require that exporters release their proceeds to the central bank within a limited time period. Liquidity problems at the country level may also make it politically difficult to block

²¹ For example, one developing country private company provides collateral for an oil import swap by having the payments for its copper exports pass through an escrow account.

foreign exchange for such purposes. Legal restrictions, including the negative pledge covenants which form part of most World Bank and International Monetary Fund loans, may also make it extremely difficult to provide sufficient collateral. Furthermore, when there are many small overseas buyers, more time is needed to obtain their approval and to amend payment instructions in such a way that export proceeds are redirected into the offshore accounts; moreover, such small buyers can cause additional credit risks in themselves.

D. Other possible ways to provide security

42. Trade houses will often try to "bank" the credit risks of their risk management transactions by having a prime bank provide a letter of credit. However, if the client is a developing country company, such letters of credit are in general very hard to obtain, mainly because they would enter into the bank's credit risk evaluation procedure, and fall under its country credit lines. This is even the case if the developing country company provides a letter of credit from its local bank, because banks tend to consider letters of credit by other banks, except when provided by one of the few prime banks, as poor collateral.

43. One relatively popular way of providing security is the pledge of physical inventory. Inventory of the commodity being hedged or any other asset of lasting value can be made into collateral for a risk management transaction. For example, when gold is stored in a Western central bank, a warrant on this gold can turn it into collateral. Other metals are also used for this purpose. When there are reliable local warehouses, managed by a widely respected international custodial agency, local stocks can also serve as collateral. When commodities move into such a warehouse, the ownership title can be automatically transferred to the international buyer, providing him with good collateral. For example, the Sudan at one time received pre-export credits for its cotton, which were collateralized by the stocks in its "field" warehouses (which were supervised by an international custodial company). Such stocks will need to be physically checked, and the legal conditions in the country examined, to determine whether the title to the stock warrants provides sufficient security. Unfortunately, such supervised warehouses are absent in many countries, in particular in Africa, and legal conditions are often ambiguous.²² Whenever local stocks are used as collateral, sufficient insurance cover needs also to be available - which in many cases may prove difficult.

44. Security can also be provided by local banks, in the form of performance bonds. These are usually available at a low cost for companies with a reasonable balance sheet, and even if they are expressed in local currency, they give some security to the buyer. In any case, many international firms providing risk management facilities are not allowed to lend to private borrowers in a number of countries, and need therefore to go through local banks; even if they are allowed to give direct loans, they may prefer to cooperate with local banks, which can more easily monitor the counterpart's performance.

45. Parent companies based in developed countries can in principle provide all necessary guarantees for a risk management transaction by one of their developing country subsidiaries. For purely physical trade deals, including fixed-price forward deals, this is indeed done. However, it appears that in those cases where a swap has been arranged for an investment project in which a major

²² The creation of a system of supervised warehouses, able to give out warehouse warrants that are considered reliable by the international trade, can be one of the main spin-offs of the creation of a domestic commodity exchange, trading either forward or futures contracts. A bank can also decide to take over a warehouse (putting its own management in place) and issue warehouse receipts to itself. While this was not uncommon in the past, it is no longer often done; it may be a highly interesting option for developing country banks, giving them a comparative advantage over foreign banks.

transnational was a partner (such as a copper swap with a Papua New Guinea company), the foreign parent company has insisted on a stand-alone basis and refused to give any guarantees.

46. Government guarantees will in many cases improve the risk profile of a transaction, even when state-owned companies are concerned, as it is considered that governments are less likely to default than their companies. Government guarantees are most useful for strategic hedges, with large volumes and long maturities. However, in those countries where IMF and the World Bank are closely involved in macroeconomic policy formulation, these agencies often pressure governments not to guarantee additional offshore transactions.

E. Sovereign risk insurance²³

47. A very large part of all transactions with a credit component (imports, pre-financed exports as well as most risk management deals) are insured against sovereign risks.²⁴ Only a few banks are able to structure transactions in such a way that short-term risk management facilities (for less than one year) do not require any third-party insurance. The existence of the insurance cover is normally unknown to the developing country actors, because insurers insist on confidentiality. If the trade house or bank concerned divulges the fact that the deal is insured, the insurance is automatically cancelled (a trade house can lose its insurance coverage even when disclosing the existence of an insurance policy to its financing bank). If insurance is not available, most larger trade houses and banks will either abstain from providing credit to the country, or build a high risk premium into their margins. There are different categories of sovereign risk insurance available, and the availability of insurance coverage, as well as the premiums to be paid, differ from country to country and from category to category. Governments, through their policies, can have a large influence on the premiums to be paid. Adopting proper policies and an appropriate legal framework would reduce the overall costs of insurance for the

²³ Forfaiting and factoring, which work in much the same way as sovereign risk insurance, are not discussed here. Forfaiting companies (often part of banks or in some cases owned by insurance companies), often at the instigation of the importer, buy goods from the exporter, as evidenced by promissory notes, and discount them at a fixed rate (that is, they provide pre-export finance). At delivery time, the exporter will deliver the goods to the importer, and the forfaiting operation will be offset. Forfaiting companies assume full credit, political and interest rate risks on the goods (although they can lay off some of the risks in the secondary forfaiting market). The customers pay a somewhat higher margin than with normal commercial lending because the forfaiter assumes all the risks. Factoring is similar but on a more short-term basis. As is the case for forfaiting, factoring companies take over all risks, at a fee several percentage points above base lending rates. In practice, the driving force behind forfaiting and factoring is their credit-enhancing role; according to available information, this type of operation has so far not been used to lay off the counterparty risks of risk management deals.

²⁴ That is, they are insured against:

- a failure of a governmental exporter to ship the commodity or the failure of a government guarantor to repay an advance;
- a failure of a private exporter to deliver the commodity owing to a change in export regulations or government interference; and/or
- the inability of a foreign company to ship the commodity owing to cancellation of export licenses, or confiscation, expropriation or nationalization of the commodities.

(see N. Budd, *op. cit.*, 1993). It will be very difficult for developing countries and economies in transition to enter into risk management transactions for periods of more than three years: sovereign risk insurance policies are rarely available for periods of more than three years. A solution would be to build into the transaction the possibility of unilateral cancellation of the transaction by the lender after, for example, two years (with the outstanding net value of the transaction being paid in cash).

country, and would allow the shifting of insurance cover from a relatively expensive (and scarce) category to a cheaper one.

48. To simplify somewhat, there are four basic types of sovereign risk insurance.²⁵ The first type is insurance against non-delivery (contract frustration) by a private entity, for example because the government repudiated export licences. The country limits for this type of insurance are rather low, and insurance premiums are relatively high.²⁶ The second type is insurance against contract frustration by a government agency, or under a government-guaranteed contract. This insurance is cheaper than the first type, and more easily available.²⁷ The third type of insurance, which is the cheapest and the most widely available, covers the risk of contract failure due to confiscation or nationalization of, among others, the goods provided as loan security. The fourth type of insurance is against the risk of contract frustration on countertrade and barter, in effect a sub-category of the other two categories of contract frustration, which has become relatively easy to insure, at low rates. The need for this type of insurance has increased rapidly in recent years.²⁸

49. Sovereign risk insurance is normally available only for periods of up to three years. This creates an important barrier to longer-term risk management transactions. Insurance coverage is provided by both public and private insurance underwriters. Public schemes include the Multilateral Investment Guarantee Agency, part of the World Bank, which currently does not provide sovereign risk insurance on risk management deals; government agencies (in both developed and developing countries); and private insurers. Government agencies include agencies such as Coface (France), Hermes (Germany), and some special schemes set up to facilitate trade with certain countries or groups of countries.²⁹ They are often prepared to underwrite contracts in the national

²⁵ Based on information from Lloyds Chambers, London, and the following two papers: Investment Insurance International (III), *Political and financial risks in overseas contracts - the insurance available from the commercial market*, London 1992; III, *Investment insurance coverage*, London 1992".

²⁶ Just like banks, insurance companies define maximum exposure towards individual countries. For medium-risk countries, the capacity of the main private underwriters can be estimated at about US\$ 100 million. For some of the high-risk countries, not more than US\$ 10 million is available.

²⁷ Rates are lower in particular because the risk of the central bank blocking a payment in foreign exchange by a private company is larger than that of the central bank blocking payment by a government company (in recent years, it has happened quite regularly that letters of credit by private companies were blocked, whereas state-controlled companies were still allowed access to foreign currency).

²⁸ This is particularly useful for countries such as Angola, Iran, Peru and Nigeria, where it is difficult to find insurance coverage, and for countries such as Indonesia and Malaysia which have onerous countertrade requirements. In many cases, insurance is taken on to cover the situation where goods have been delivered and accepted by the buyer but the exchange goods, e.g. oil, have not been delivered. This may be due to a law preventing the export, or even a law preventing the import of the goods from the seller's country.

²⁹ For example, in late 1993, the Russian Federation was planning to set up a sovereign risk insurance facility, based in London and guaranteed through a US\$ 100 million deposit of gold and gemstones in a Swiss bank; practical problems have so far prevented the implementation of this scheme. The European Union and various countries have set up sovereign risk insurance schemes specifically for trade with, and investment in, the CIS republics and the countries of Eastern Europe. It appears that these schemes do not yet cover pure risk management transactions, but are being used for investment and trade transactions with risk management components.

interest where the risks are unacceptable to commercial insurers. On the other hand, they usually have rather limited lists of countries for which insurance is available. The only government agency providing significant insurance for risk management deals with developing countries appears to be the Overseas Private Investment Corporation (OPIC), in the United States of America. OPIC offers coverage against certain political risks that would prevent a private exporter or importer in a developing country from meeting its obligations under a swap contracted with a United States intermediary involved in a private sector project in an OPIC-eligible country.³⁰ The private sovereign risk insurance market is fairly recent, having started only in the mid-1970s. Private insurers accept virtually every country, including those not covered by national agencies.

50. The limited availability of sovereign risk insurance has constrained the offer of longer-term risk management instruments to developing countries, and the high costs of such insurance has made certain possible transactions unattractive. Through their policies, countries can move from one sovereign risk insurance category to another, expand access to insurance by their credit and risk management providers, and bring down the insurance premiums to be paid. Sovereign risk insurance premiums can differ widely. For example, in early 1992, the private market premiums for covering contract frustration risks with Angola were 6 to 8 per cent (on an annual basis), while the premiums on confiscation were only approximately 1.5 per cent. For Argentina, these rates were respectively 2-5 per cent and 0.75-1 per cent; for Ghana 3 per cent and 1 per cent; and for Kenya 3-6 per cent and 1 per cent. In all these cases, confiscation coverage was widely available, while contract frustration coverage was limited, for instance to contracts guaranteed by the central bank.

F. Policy conclusions

51. When the political will exists, governments can relatively easily create the conditions that would allow a reduction of overall insurance rates, and a shift in sovereign risk insurance requirements from the category of contract frustration to that of confiscation, thus reducing their countries' costs of international trade by probably over one percentage point. The following steps would help to create such conditions:³¹

- * Local laws relating to exports and export financing have to be made clear. A lack of clear rules or frequent changes in rules can make insurance coverage unavailable, or available only at high premiums. Also, laws need to be such that they do not prevent normal commercial practice.
- * Local laws relating to title and security have to be made clear. This is essential to ensure that the collateral obtained is indeed "good" collateral.
- * Foreign companies need to be allowed to take title to commodities, and to hold export licences, even if only a portion of the eventual purchase price has been paid. If foreign companies receive such title and export licences, their risk becomes one of confiscation of the goods, which can be insured quite cheaply.
- * The regulations regarding export licensing need to be made clear, and be adapted to allow for greater security for foreign lenders: foreign companies have to be in a position to receive export licences at the moment that the

³⁰ This insurance covers the main types of political risks but is of limited use for the time being, because transactions with public sector companies cannot be insured. With the liberalization of commodity exports and imports in developing countries, its use to United States risk management intermediaries may increase.

³¹ Based on Budd, *op.cit.*, 1993.

transaction (provision of pre-finance or a risk management facility) is entered into.

- * In the case of a privatization of export structures, the government should extend its guarantees to the newly privatized companies, and make clear its policy of doing so. In this way, foreign companies no longer run the risk that all insurance coverage is lost when a counterpart is privatized.

Any steps taken by a government in these directions would benefit from being publicized widely. Governments can also make a conscious effort to familiarize the major political risk insurance underwriters with their new export policies, in order to ensure that the changing policy environment is indeed reflected in more easily available and cheaper insurance coverage.

Chapter V

KEY OBSTACLES TO A GREATER OFFER OF RISK MANAGEMENT INSTRUMENTS TO DEVELOPING COUNTRY ENTITIES, AND POSSIBLE ROLES OF THE INTERNATIONAL COMMUNITY

A. Country-specific barriers influencing counterparty risk evaluation

1. Organizational and economic policy barriers

52. Among the main barriers at country level for the completion of risk management programmes one can mention an overly bureaucratic functioning of organizations, and a lack of incentives for institutions and individuals to take decisions. Such conditions can stifle any progress towards a viable risk management policy. Economic policy conditions may also make it impossible for an entity to enter into risk management transactions. The main barrier in this respect is the existence of inappropriate foreign exchange regulations; taxation policies and a policy of minimum export prices may also be hindrances.

53. Foreign exchange controls (as well as shortages) may make a risk management transaction legally impossible (see below), but even when these controls are such that a risk management transaction is feasible, they may restrict a counterparty's ability to meet foreign exchange obligations, in particular obligations for large amounts or which need to be met in a short period of time. When the offer of foreign exchange is controlled by the central bank, the risk of providing the risk management facility is deemed higher than when foreign exchange is sold freely on the open market. Countries do not need to fully liberalize their capital flows to enable the use of risk management instruments; for example, a policy of specific credit lines, in foreign currency, approved by the central bank for specific producers, exporters and others which are deemed to have a legitimate need to manage their price risks, may already give sufficient flexibility. More broadly, central bank regulations and other government policies should specifically authorize hedging operations; such hedging operations are a normal part of any pre-financing arrangements, and will be entered into anyway, even if illegal. However, if illegal, this creates additional risks to the lender, and thus will result in a higher risk premium for which, ultimately, the exporter and its country pays.

54. Value-added taxes can be a major hindrance to using local stocks as collateral. As described before, a foreign lender will often require the transfer of a title of ownership in order to accept commodities in local warehouses as collateral. If he then is asked to advance value-added taxes, this adds considerably to the costs of the transaction (in terms of liquidity costs and paperwork costs). This problem can be overcome if taxation authorities recognize this type of transaction as an off-balance sheet transaction and treat the commodities involved as bonded warehouse stocks.

55. Similarly, policies determining minimum export prices may make it more expensive for developing country producers or exporters to obtain access to finance or risk management. Access will not be completely prevented, but in order to meet their commercial obligations, producers/exporters may have to resort to illegal means, such as shipping additional, undeclared commodities. While de facto this may in many cases be accepted by customs officials, it does contravene export regulations; in the first place this creates risks, and in the second place it may lead to the automatic cancellation of a sovereign risk insurance policy.

2. Legal barriers

56. International banks and trade houses will be hesitant to enter into a risk management transaction if they are not sure about its legality and about its enforceability given local legal conditions. Many legal conditions make it exceedingly difficult to structure properly a risk management transaction; in other cases, it may be hard to obtain sufficient certitude about legal conditions. These are among the principal obstacles to the provision of risk management instruments to companies in developing countries and economies in transition. Legal counsel, often both local and offshore, is in general required to ensure that a transaction is possible within the country's and the counterpart's legal conditions. It is often difficult to obtain quick and reliable information on the legal validity and enforceability of the proposed transaction. Legal opinion is also expensive; and given that a typical gross margin on an export pre-financing transaction of US\$ 10 million (the maximum most banks are willing to pre-finance in particular for soft commodities in any single country) is some 2 per cent, or US\$ 200,000, it is clear that high legal fees can quickly make a transaction unattractive. Countries would benefit much from clarifying their rules and regulations. Some legal barriers affecting the availability and cost of sovereign risk insurance have been discussed in chapter IV.E. Other problems include the nature of local approvals needed to execute the transaction; the impact of foreign exchange regulations on the proposed structure; the enforceability of the risk management transaction, of the underlying trade contracts and of the security arrangements; possible negative pledge covenants; and, particularly in the case of transactions involving gold, the possibility of claims of sovereign immunity.

57. Those providing risk management facilities usually prefer that the export contracts for the commodities being hedged be assigned to them. Among other things, and as discussed in chapter IV.E., this would be one of the conditions for allowing them to take out insurance cover against the risk of confiscation, rather than the more expensive and scarcer insurance against contract repudiation. The regulations governing export licences are thus of particular importance. Many countries do not permit the issuance of export licences until the physical commodity exists, the export price is fixed, and a letter of credit is issued. Also, many countries allow export licences to be issued only in the name of licensed exporters, without a right to transfer them to foreign entities; and they issue only export licences which expire when not used by a certain date.³² Each of these conditions has a negative impact on the usefulness of the commodity as collateral, and thus on the availability and cost of credit (including through a risk management transaction). Changing these rules can greatly facilitate access to pre-export finance and risk management facilities.

³² See Budd, *op.cit.*, 1993, for a further discussion of this issue, and for suggestions as to how export licence regulations can be amended to improve access to credit.

**B. The influence of the policies of international organizations:
negative pledge covenants**

58. One of the principal obstacles to governments applying for commodity-linked finance may well be the loan policies of international financial institutions, in particular the World Bank, International Monetary Fund (IMF), European Bank for Reconstruction and Development (EBRD) and Asian Development Bank (ASDB). These organizations include in their loan conditions a negative pledge clause or covenant. Such a clause broadly prohibits government agencies or "instrumentalities" (such as state enterprises) from pledging or otherwise encumbering their principal export commodities as security for loans or other financial accommodations, including risk management transactions. These commodities include the gold reserves of the central bank, crops (including future crops), mineral and fuel reserves. Thus, securitization mechanisms such as escrow accounts fuelled by the proceeds of the export of commodities by a state entity are forbidden. Clearly, even if unintended, one effect of such clauses is to make it more difficult for sovereign borrowers to offset commodity price risk by engaging in commodity-indexed finance and risk management facilities, which normally require the borrower to pledge, or pass title to the physical commodities to be exported.

59. The World Bank, IMF, EBRD and ASDB normally provide unsecured loans, and do not wish to see their access to future financial flows from their borrowers diluted by the pledging of commodities to third parties. Including such negative pledge clauses in loan agreements helps these organizations to maintain their high credit ratings, which allows borrowing on the international market at the lowest possible rates. It is also claimed that negative pledges protect governments from the temptation to mortgage resources long into the future to meet current needs.

60. Government entities have at times ignored the negative pledge clauses in their loan agreements and committed part of their commodities as collateral in risk management transactions they undertake with private banks, against which the lending agencies in practice have only very limited possibilities of recourse. However, it should be recognized that this procedure is not optimal. The legality of this type of collateralization is not clear, and thus good sovereign risk insurance becomes virtually impossible. This adds to the costs and makes transactions difficult to structure.

61. The World Bank and others recognize that negative pledge covenants can cause serious problems for their client countries, in particular that private lenders will be highly unlikely to provide finance on an unsecured basis. The IMF has for some time now allowed the use of escrow accounts by countries with scarce foreign currency reserves. The World Bank decided only in 1990 to introduce the possibility of waiving the covenants on a case-by-case basis. In March 1993, this policy was strengthened by the decision to allow, in principle, generic waivers for certain categories of transactions and for certain countries.

62. Nevertheless, these new rules were not very satisfactory, and compared unfavourably with, for example, the conditions accepted by the EBRD in late 1993. The World Bank found that no countries met the tough conditions set out for generic waivers. It came under strong pressure to change its policies when it became clear that billions of dollars in oil investments were held up because of World Bank negative pledge conditions. In November 1993, the Bank moved to conditions close to those of the EBRD.

63. Current World Bank conditions for waivers still appear unnecessarily strict. Among other things, conditions are such that only countries where the government controls over three quarters of the productive assets can apply. Also governments need to have accepted a programme of structural change. Waivers can only be used for project finance and only the commodities produced in the project can be pledged as collateral. The minimum term of the finance is five years and

the project must generate sufficient additional foreign exchange. This implies that countries where the private sector is quite large but does not have the sophistication and counterpart reputation to enter into structured finance deals are left in the cold. Securitizing a budget-oriented operation through central bank gold guarantees is not allowed. Operations where commodities different from those produced in the project are pledged, for instance coffee exports to securitize an oil import swap, are impossible. Thus, virtually all import-related collateralized risk management operations would be illegal. The waivers that have been granted, for instance for Nigeria, the Russian Federation and Uzbekistan, have been for "enclave"-type projects (in particular in the oil sector), which generate clearly identifiable extra export earnings.

64. It is not evident that the World Bank and other international agencies operating similar negative pledge covenants have a legitimate right to impose such strict conditions. The attested purpose of the covenant is to ensure the Bank's access to the expected future income flows of a country. Logically, any project or activity that can only be realized if security is pledged, and which is expected to generate supplementary foreign exchange beyond that needed to repay the credits related to the project or activity, can be expected to increase the capacity of the country to serve all its loans, including World Bank loans. There would thus appear to be no legitimate economic reason to limit country eligibility or time-frame. Limits on the commodities to be pledged are understandable: if the project or activity fails to reach its expected outcome, the total resources freely available to reimburse Bank loans would be reduced. Nevertheless, if this condition were adhered to strictly, governments would be prevented from fully exploiting the possibilities open to them. Instead of the current rigid approach, a case-by-case approach by the Bank (and other lending agencies), comparing expected benefits for the country and disadvantages for the Bank, would appear warranted. As discussed in earlier chapters, the general benefits of being able to provide good collateral for credit transactions, including those implicit in risk management transactions, are substantial, and the World Bank's negative pledge policy would appear to be a major hindrance to countries' capacity to improve their management of trade flows.

C. Possibilities for and problems with an international insurance scheme for sovereign risks

65. Some international agencies put themselves between a developing country user and the provider of the risk management instrument. For example, the International Finance Corporation (IFC) has done so for Ghana's Ashanti gold mine, and, in relation to financial risk management, for several other developing country entities.³³ The EBRD provides the same possibility for currency and interest rate swaps linked to specific projects.³⁴ Such intermediation plays a direct credit-enhancing role: for the purposes of the bank or trade house providing the risk management instrument, the counterparty is not a low-rated entity but the IFC or EBRD, both of which have very high credit ratings. The entity in the developing country or in the economy in transition pays for this intermediation through the margin which the intermediating agencies add on. This type of arrangement can be seen as a form of insurance. However, the activities of the IFC are rather limited so far, and the EBRD covers only financial risk management transactions; OPIC (see section IV.E) also has a limited role to play in this area.

³³ See Jack D. Glen, *How firms in developing countries manage risk*, World Bank, International Finance Corporation discussion paper No. 17, 1993.

³⁴ EBRD, Treasury, *Intermediation of interest rate and currency swaps for Eastern and Central European Borrowers*, December 1991.

66. The activities of agencies such as the IFC in taking on the counterparty risks of developing country entities doubtless provide the access to risk management for entities which otherwise would have been locked out of the risk management market, enhancing in the process their overall access to investment credit. This therefore raises the issue of whether there is a need to introduce a more global facility, such as a world-wide sovereign risk insurance fund. There have been informal discussions, for instance, on whether such a fund could function within the First Account of the Common Fund for Commodities, or as an extension of the activities of the Multilateral Investment Guarantee Agency of the World Bank. There is little doubt that if operational difficulties could be overcome, such an insurance fund would indeed have a positive effect on banks' and probably trade houses' willingness to provide long-term risk management instruments, provided that the coverage mechanism is simple, that the procedures for reimbursement of claims are not cumbersome, and that the insurance premiums are not prohibitive. If such a facility existed, banks and trade houses would lay off not only the worst country risks, but also part of the country risks for larger transactions where the risks of a transaction make it exceed a country's credit line.

67. The modalities of such an insurance fund would likely depend on the commodities and the countries involved. In some cases the fund would need to cover only the first tier of risks, while in other cases it might need to cover risks above a certain threshold. It could act as a re-insurance facility for the private market, or additionally, take on a more direct role along the lines of the IFC's style of intervention. An insurance fund could underwrite only certain components of risk management transactions, or it could underwrite the whole transaction. The likelihood of the latter being feasible is rather small, given the amounts of capital required and the perceived country risks of all but a few developing countries. More focused forms of insurance, however, would appear feasible. One possibility would be for such a fund to guarantee the letters of credit of selected developing country banks, so that these have the financial status of prime bank letters of credit (which, in turn, are good collateral for most risk management transactions). Another possibility would be to insure against the risk of non-delivery of physical commodities which have been the collateral for risk management facilities. In any case, the insurance fund would need sufficient leverage over its beneficiary countries in case they default on their obligations. This would probably be possible only if its activities were linked in one way or another with those of the main international lending agencies. These issues clearly require considerable additional research.

68. One essential question is whether such a sovereign risk insurance fund could be made actuarially-sound: could it be self-financing? If it were a profitable venture, it is legitimate to wonder why the private sector has not yet developed such a large-scale fund. Indeed, it is deemed unlikely by most specialists that such a multinational insurance fund could ever be self-financing, unless the premiums charged are so high that they would make insurance unaffordable for a large number of poorer developing countries and so defeat its purpose.

69. This would suggest that, if it is felt that the absence of such a global sovereign risk insurance fund is indeed a very serious obstacle to developing country entities that wish to manage their risks,³⁵ then it would be necessary to accept that this insurance fund be conceived as similar to other macroeconomic development support or investment support facilities; that is, premiums would have to be partly subsidized by the international community. A rationale for this can be found in the potentially high external benefits of individual risk management transactions. As they would help stabilize not only the earnings of the company involved, but also the earnings of the country, and in all likelihood also the income of the government, they would help reduce the volatility of GDP and exports, which in turn would, *inter alia*, encourage credit providers to raise the country's credit standing.

³⁵ As discussed before, there are several other ways through which the access of such entities to risk management markets can be improved.

CONCLUSION

70. This report has shown that private sector entities and governments in developing countries or economies in transition could take steps to mitigate the impact of counterparty and sovereign risk factors on the provision of and access to commodity price risk management instruments. Private entities as well as state entities interested in using such instruments could, in particular, make efforts to improve their standing as a counterparty through, for example, internal training and building up good working relationships with foreign companies, and to enhance their possibilities to provide collateral through, *inter alia*, keeping offshore accounts. Governments could play a major role by providing the proper regulatory framework, as discussed in section IV.E. This framework should make it possible for a country's various economic entities to pledge physical commodities within the country as collateral for risk management transactions. An enabling legal framework concerning ownership, bankruptcy laws etc. is thus needed, as well as enabling policies on, among other things, export licensing, minimum export prices, taxation of commodity transactions, and the use of foreign currency for hedging purposes.

71. The international community could support private entities and governments in the above-mentioned efforts, through appropriate research, training technical advice, etc. It could also take action to reduce barriers for developing countries and economies in transition to the use of risk management instruments, and to provide additional facilities enabling entities from such countries to access risk management markets. One important action would be the modification of the current negative pledge policies of multilateral lending agencies. The latter could also consider playing a larger role in intermediating risk management transactions, for instance when they are providing project or budget finance. Finally, further consideration could be given to the formation of an international sovereign risk insurance fund, focused on insuring specific aspects of risk management deals.



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COUNTERPART AND SOVEREIGN RISK OBSTACLES TO IMPROVED ACCESS TO RISK MANAGEMENT MARKETS: ISSUES INVOLVED, PROBLEMS AND POSSIBLE SOLUTIONS

Report by the UNCTAD secretariat

Corrigendum

The second paragraph of the box on the cover page should read as follows:

This report is rather technical and presupposes a good knowledge of market-based risk management instruments, their uses and modalities. Readers are referred to document UNCTAD/COM/15, "A survey of commodity risk management instruments", 15 March 1993, for background descriptions.

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